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SCIENTIFIC COMMUNICATION AT THE XVII INTERNATIONAL CONGRESS OF PSYCHOLOGY, MOSCOW, 1966 AND SOME IMPLICATIONS FOR THE DESIGN AND OPERATION OF INTERNATIONAL MEETINGS. APA-PSIEP REPORT NO. 29.

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THE PRINCIPAL OBJECTIVE OF THE STUDY WAS TO DEFICT SCIENTIFIC INFORMATION EXCHANGE IN THE SPECIAL ENVIRONMENT AFFORDED BY THE CONGRESS. DATA WAS COLLECTED ON TWO TYPES OF PARTICIPANTS--THOSE WHO MADE FORMAL PRESENTATIONS, THE AUTHOR GROUP, AND THOSE WHO WERE PRESENT DURING PAPER PRESENTATIONS, THE ATTENDANT GROUP. PART I OF THE REPORT CONSTITUTES THE FULL REPORT OF THE DATA UNDER THE HEADINGS--(1) ORIGIN AND PLANNING OF THE STUDY, (2) AUTHORS--THE WORK THEY PRESENTED AND THEIR INFORMATION-EXCHANGE ACTIVITIES AT THE CONGRESS, (3) PATTERNS OF INFORMATION EXCHANGE AMONG CONGRESS ATTENDANTS, (4) INFORMATION-EXCHANGE ACTIVITIES AND COMMUNICATION PROBLEMS AT THE CONGRESS, AND (5) SCIENTIFIC INFORMATION EXCHANGE ACTIVITIES EXTRANEIOUS TO CONGRESS PARTICIPATION. PART II SUMMARIZES PART I OF THE REPORT WITHIN THE CONTEXT OF THE OPERATION OF THE CONGRESS. PART III OF THE REPORT IS AN ATTEMPT TO LIST AND COMMENT UPON SOME OF THE SCIENTIFIC COMMUNICATION ISSUES RAISED BY THE PROJECT'S EXPERIENCE IN CONDUCTING THE STUDY. HARD COPY OF THIS DOCUMENT IS AVAILABLE FROM THE APA'S PROJECT ON SCIENTIFIC INFORMATION EXCHANGE IN PSYCHOLOGY, 1200 SEVENTEENTH ST., N.W., WASHINGTON, D.C. 20036. (RP)

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Reports of
**The American Psychological Association's
Project on
Scientific Information Exchange in Psychology**

*Project on
Scientific Information Exchange in Psychology*
**AMERICAN PSYCHOLOGICAL ASSOCIATION
1200 Seventeenth Street, N.W. • Washington, D. C. 20036**

FOREWORD

The present report deals with the American Psychological Association Project on Scientific Information Exchange in Psychology's (APA-PSIEP) study of the XVIIIth International Congress of Psychology held in Moscow during August, 1966. The study was planned and conducted by the staff of the Project (as named in the foreword to Volume II of the Project's Reports). A major portion of that staff moved to The Johns Hopkins University Center for Research in Scientific Communication (JHU-CRSC), and data on the Moscow Congress were then analyzed at that Center. In addition, this group undertook the remaining tasks in completing the study, including following up surveys, obtaining data from Europe and USSR, and having the complete questionnaires translated. Part I of the report constitutes the full report of the data and was prepared by the staff of JHU-CRSC. The work of the Center is supported by the Office of Science Information Service (OSIS) of the National Science Foundation (NSF) through Grant NSF-GN 514. The members of the Center's staff are: William D. Garvey, Director; Bertita E. Compton, Assistant Director; Nan Lin, Research Associate; Carnot Nelson, Research Associate; Kazuo Tomita, Research Analyst; Madelyn Miller, Administrative Assistant; and Judith Nims, Secretary-Research Assistant. Part II of the report was prepared by the present staff of APA-PSIEP and summarizes Part I of the report within the context of the operation of the Congress. Part III of the report is an attempt to list and comment upon some of the scientific communication issues raised by the Project's experience in conducting the study. Work on the last parts of the report was supported by OSIS of NSF under Grant GN-547. The present Project's staff includes: Belver C. Griffith, Director; Patricia Gillam, Administrative Assistant; and Patricia Bledsoe and Marilyn Cohen, Research Assistants.

April, 1968

**SCIENTIFIC COMMUNICATION AT THE XVIII INTERNATIONAL CONGRESS OF PSYCHOLOGY,
MOSCOW, 1966 AND SOME IMPLICATIONS FOR THE DESIGN AND OPERATION OF
INTERNATIONAL MEETINGS**

TABLE OF CONTENTS — Report #20

	Page
FOREWORD	iii
PART I: SCIENTIFIC INFORMATION EXCHANGE AND INTERACTION AT THE XVIIIth INTERNATIONAL CONGRESS OF PSYCHOLOGY, MOSCOW, 1966	1
ORIGIN AND PLANNING OF THE STUDY	1
Initiation of the Study	1
Procedure	2
AUTHORS: THE WORK THEY PRESENTED AND THEIR INFORMATION-EXCHANGE ACTIVITIES AT THE CONGRESS	4
Nature and History of Presentations	4
Pre- and Postmeeting Dissemination of Work Reported at the Congress	6
Information Exchange and Meeting Effectiveness as Reported by Authors	10
PATTERNS OF INFORMATION EXCHANGE AMONG CONGRESS ATTENDANTS	15
Familiarity, Interaction, and Impact of Information on Attendants' Work	15
Overall Effect of Congress Attendance upon Work	19
INFORMATION-EXCHANGE ACTIVITIES AND COMMUNICATION PROBLEMS AT THE CONGRESS	20
A Diagrammatic Description of Scientific Information Exchange in Relation to Presentations	20
Communication Problems at the Congress	24
SCIENTIFIC INFORMATION-EXCHANGE ACTIVITIES EXTRANEEOUS TO CONGRESS PARTICIPATION	24
PART II: AN OVERVIEW OF THE FUNCTION OF THE XVIIIth INTERNATIONAL CONGRESS OF PSYCHOLOGY, MOSCOW, 1966, IN SCIENTIFIC INFORMATION EXCHANGE	31

TABLE OF CONTENTS (Continued)

	Page
THE STUDY OF INFORMATION EXCHANGE AT THE CONGRESS	33
SOME DATA ON INFORMATION EXCHANGE AT THE CONGRESS	33
Symposia Presentations	33
The Authors' Experiences at the Congress and the Resulting Effects on Their Work	34
The Attendants' Experiences at the Congress and the Resulting Effects on Their Work	34
Scientific Communication Problems at the Congress	35
SUMMARY	35
PART III: SOME ISSUES RELATIVE TO SCIENTIFIC COMMUNICATION AT AN INTERNATIONAL CONGRESS	36
Technical Problems of Organizing and Running the Congress	36
Programing Congress Events	36
Supplemental Meetings	37
Tourism	37
Translation	37
General	37

LIST OF TABLES

		Page
Table 1	Distribution of Questionnaires and Response Rates	3
Table 2	Nature of Presentations	4
Table 3	Time Intervals Involved in Reported Work	5
Table 4-A	Number of Pre-Congress Oral Reports on Material Contained in Congress Presentations	6
Table 4-B	Number of Pre-Congress Written Reports on Material Contained in Congress Presentations	6
Table 5	Locus of Occasions and Audiences for Pre-Congress Oral Reports of Work	8
Table 6	Outlets for Pre-Congress Written Reports of Material in Presentations	9
Table 7	Authors' Specific Plans for Future Publication of Their Presented Work	9
Table 8	Authors' Scientific Activities in Same Subject-Matter Areas as Their Presentations	10
Table 9-A	Activities Modified in Area of Authors' Presentations	11
Table 9-B	Nature of Modifications	11
Table 10	Authors' Modifications of Work in Areas not Represented by Their Presentations	12
Table 11	Information Anticipated Through Continuing Interaction	13
Table 12	Nationality of Persons with Whom Authors Plan to Continue Interaction Initiated at Congress	14
Table 13	Percentage of Authors Receiving One or More Requests for Copies of or Information on Their Presentations and Nationality of Requestors	16
Table 14	Nature of Attendants' Prior Acquaintance with Work of Authors of Presentations They Heard	17
Table 15	Attendants' Familiarity with Work of Authors of Presentations They Heard	17
Table 16	Attendants' Interaction with Authors about Their Presentations	18
Table 17	Attendants' Activities in the Same Subject-Matter Areas as the Work Described in the Sampled Presentations	19
Table 18	Major Modifications in Attendants' Work in Same Areas as Presentations	20

LIST OF TABLES (Continued)

	Page
Table 19 Major Modifications in Attendants' Work Resulting from Information Received at the Congress	21
Table 20 Scientific Communication Problems Encountered at the Congress and Suggestions for Improving Scientific Information Exchange at Future International Meetings	25-27
Table 21-A Authors' Use of Major Scientific Languages	28
Table 21-B Attendants' Use of Major Scientific Languages	28
Table 21-C Participants' Use of Major Scientific Languages	28
Table 22-A Frequency of Foreign Travel to Conduct Professional Work	29
Table 22-B Duration of Professional Visits to Foreign Countries	29
Table 23-A Nature of Professional Work Conducted in Foreign Countries	30
Table 23-B Sources of Financial Support for Travel and Work in Foreign Countries	30
Table 24 Registration at the XVIIIth International Congress by Countries	32

FIGURE

Page

Figure 1	Diagrammatic description of the scientific information-exchange activities surrounding presentations made at the XVIIIth International Congress of Psychology.....	22
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LIST OF APPENDICES

		Page
Appendix A	Cover Letter for Moscow Congress Author Survey	39
Appendix B-1	Author Questionnaire	40
Appendix B-2	Attendant Questionnaire	44
Appendix C	Nationality of Participants in Moscow Congress	46
Appendix D	Types of Modifications Reported by Authors Relative to Activities Modified	47
Appendix E-1	Languages Used by Authors	48
Appendix E-2	Languages Used by Attendants	49
Appendix F-1	Foreign Countries in Which Authors Had Conducted Professional Work	50
Appendix F-2	Foreign Countries in Which Attendants Had Conducted Professional Work	51

Part I

SCIENTIFIC INFORMATION EXCHANGE AND INTERACTION AT THE XVIIIth INTERNATIONAL CONGRESS OF PSYCHOLOGY, MOSCOW, 1966

ORIGIN AND PLANNING OF THE STUDY

Initiation of the Study

On behalf of the Executive Committee of the International Union of Psychological Sciences, Professor H. C. J. Duijker issued an invitation to the American Psychological Association's Project on Scientific Information Exchange in Psychology to plan and conduct a study of the XVIIIth International Congress of Psychology, in August 1966, in Moscow¹. The Committee indicated that the types of data collected by the Project in its studies of national meetings² and of a previous international congress of psychology³ would be of value to the IUPS in gauging the effectiveness of such gatherings and in planning future ones.

The specific plans and procedures for this study, outlined in 1966 by the persons then associated with the Project on Scientific Information Exchange in Psychology⁴, were the following, which were submitted to all interested parties prior to the Congress and to which all agreed.

1. The study would include two questionnaire surveys conducted under the auspices of the IUPS, sponsors of the Congress.
2. The conduct of the study would be an internationally cooperative effort involving three research teams: (a) a Soviet team headed by a Soviet psychologist and representing the Soviet Psychological Association; (b) a European team, headed by Professor Duijker, and representing the International Union of Psychological Sciences; and (c) an American team, consisting of members of the Project staff and representing the American Psychological Association. (Professor Leontiev, Director of the Psychology Department of the Academy of Pedagogical Science, Moscow University, and president of the XVIIIth International Congress of Psychology, appointed Vladimir G. Aseev to direct the Soviet team, and Professor Duijker appointed a member of the staff at the University of Amsterdam, M. J. van Rijswijk, to represent the IUPS.⁵)

¹The study was supported by a research grant from the Sloan Foundation.

²American Psychological Association Project on Scientific Information Exchange in Psychology. Reports of the American Psychological Association's Project on Scientific Information Exchange in Psychology. Vol. 1, Reports #4 and #5. Washington, D.C.: American Psychological Association, 1963.

³American Psychological Association Project on Scientific Information Exchange in Psychology. Reports of the American Psychological Association's Project on Scientific Information Exchange in Psychology. Vol. 2, Report #10. Washington, D.C.: American Psychological Association, 1965.

⁴APA staff members who participated in the planning and conduct of the study were: W. D. Garvey (currently director of The Johns Hopkins Center for Research in Scientific Communication); B. C. Griffith (currently director of the APA Project on Scientific Information Exchange in Psychology); and Bertita Compton (currently assistant director of The Johns Hopkins Center for Research in Scientific Communication).

⁵Miss van Rijswijk and Mr. Aseev contributed immeasurably to the success of the study, which would not have been possible without such cooperation as theirs. Miss van Rijswijk participated in data collection during the Congress in Moscow and supervised those surveys subsequently conducted from Amsterdam. Mr. Aseev arranged prior to the Congress for all the facilities and assistants that the study necessitated, participated in data collection, and supervised the surveys conducted from Moscow. He, with the cooperation of the Soviet Congress officials, obtained five students to assist with data collection and a room which served as headquarters for the research teams and was located in the same building in which most of the Congress sessions took place. Clerical assistance was supplied when requested, and friendly advice and help were graciously given whenever sought by those involved in the study. Only few and very minor difficulties arose during the conduct of the study at the Congress, and such difficulties as occurred were promptly and graciously solved by Mr. Aseev and his associates. The USA team gratefully acknowledges the kindness and assistance of the Soviet organizers of the Congress and the cooperation of Miss van Rijswijk and Mr. Aseev.

3. The USA team would provide complete details of the study to the Secretariat of the Soviet Psychological Association (the Soviet equivalent of the APA) and request their official approval of such a study.
4. The USA team would then plan the study, develop the questionnaires, and provide all necessary materials which would go to the IUPS and the Soviet Congress officials for revision or approval. When approved by both these groups, all materials would be translated into Russian and French and the translations also reviewed by all groups prior to printing.
5. The cover letter accompanying all survey materials would appear on IUPS stationery and over the signature of Professor Duijker as a member of the IUPS Executive Committee. (See Appendix A.)
6. Each team would be responsible for the conduct of the surveys within a particular geographical area: The Soviet team's survey group included those members of the sample who resided in the USSR and other socialist states; the USA team's survey group included samples from North and South America and the Pacific countries; and the Amsterdam team's survey group comprised all other members of the samples, most of whom were located in western Europe.
7. When each team collected the returns from its surveys, all completed questionnaires would be deposited with the IUPS in the care of Professor Duijker, who would make all the collected data available to each team or to any other interested group associated with the IUPS.
8. The responsibility for preparation of a report of the findings for the Executive Committee of the IUPS would be that of the members of the USA team.

Procedure

Since the principal objective of the study was to depict scientific information exchange in the special communication environment afforded by this Congress, the survey instruments were designed to produce data on two types of participants — those who made formal presentations, the Author group, and those who were present during paper presentations, the Attendant group. The presentations themselves constituted a body of information in relation to which the interaction of these two participating groups and their acquisition and utilization of scientific information could be assessed. The Author questionnaire (Appendix B-1) dealt in part with the nature of the presented material and the dates at which such work began and first became reportable. Questions on the types, frequency, and dates of pre-Congress reports of this work afforded an indication of authors' activity in disseminating their findings, and questions on the nature of their current and planned activities in the same areas as those upon which they reported helped to define the ways in which they used any information received through Congress participation and interaction. The Attendant questionnaire (Appendix B-2) produced data on familiarity with the earlier work of authors of presentations, pre-Congress exposure to the specific work presented, former and current involvement in the areas of work represented by presentations attended, and the effect upon ongoing work of information received at the Congress.

The Congress program consisted of 37 symposia grouped into four general subject-matter areas: biological and physiological psychology, mental development, social psychology, and general psychology. Apparently, the general plan for the conduct of sessions was to have, first, the reading of basic papers (i.e., those papers scheduled in the program for presentation), followed by discussion of the papers, and, finally, by discussion of other papers that were not actually given at the symposium (i.e., those papers scheduled for "discussion only")⁶; however, all session chairmen did not follow this plan, and the conduct of symposia varied greatly. Many chairmen allowed authors of "discussion" papers some session time after the presentation of basic papers in order to summarize the main findings of their reports. Since most

⁶Technically, this plan was feasible since all papers (basic and "discussion") were to be published and distributed to Congress participants prior to the symposia. Because attendance was almost double that which was anticipated and there were far fewer volumes of papers printed than there were persons at the Congress, the distribution of printed papers was limited. Each attendant could select only a part of the total number of papers. As a result, the original plan was not followed.

authors of "discussion" papers did, in fact, make a brief presentation, the original plan of confining the study to authors of basic papers was relaxed in the case of the Amsterdam survey, thereby increasing the size of this sample and making the three samples more nearly uniform in size⁷. The total Author sample included approximately 375 of the 867 persons whose names appeared in the official program of the Congress.

Members of the three research teams attended 36 of the 37 symposia where they collected by means of a special card the names and addresses of a certain percentage of the audience. Sampling continued throughout each session and in all parts of the session room. Each day after sample cards were collected they were checked to eliminate duplicates and divided among the teams according to the geographical area for which each was responsible. Since the Attendant questionnaire focused upon a single paper heard, a particular paper was assigned to each member of this sample and the title and authorship of the specific paper indicated at the top of each questionnaire. The research teams tried to incorporate as many papers as possible in the survey. The total Attendant sample numbered approximately 500.

The three research teams mailed questionnaires within the two weeks following the Congress⁸ to the Author and Attendant samples⁹ in the geographical areas for which each was responsible. Table 1 summarizes the distribution of questionnaires and the response rates, though only approximations are possible for the Soviet team's surveys. These approximations are, however, sufficiently accurate to indicate that the data resulting from that portion of the study must be interpreted with caution. All team members felt that every possible and practical means of inducing a good response rate from the Soviet samples had been employed. The questionnaires were mailed in Moscow; the cover letter emphasized that the survey was officially sanctioned by the Secretariat of the Soviet Psychological Association and approved by Professor Leontiev, president of the Congress; questionnaires and cover letters were printed in Russian; and stamped

Table 1
DISTRIBUTION OF QUESTIONNAIRES AND RESPONSE RATES

Group ^a	Author Questionnaires			Attendant Questionnaires		
	Number Sent	Number of Usable Returns	Response Rate	Number Sent	Number of Usable Returns	Response Rate
Group A	76	62	82%	109	85	78%
Group O	203	121	60%	178	134	75%
Group M	Approx. 100	31	Approx. 30%	Approx. 200	65	Approx. 33%

^aGroup A consists of persons residing in the USA and Canada; Group M, persons residing in the USSR and other socialist countries; and Group O, those residing in countries not included in Groups A and M.

⁷ This change in procedure was adopted when it became apparent that about eight of each ten Authors of basic papers belonged in the samples to be surveyed by the USSR and USA teams. (See Appendix C.)

⁸ The mailing dates varied among the three teams. During the Congress, members of all three teams cooperated in preparing the Soviet team's questionnaires for distribution, and by the end of the Congress nearly all these questionnaires had been placed in addressed and stamped envelopes and were ready for mailing. The processing and distribution of the other questionnaires did not take place until the members of the USA and Amsterdam teams returned to Washington and Amsterdam, respectively.

⁹ All questionnaires were printed in the three official languages of the Congress (English, French, and Russian), and each research team tried to distribute to each member of their respective samples questionnaires in the languages most appropriate for them. When there was any doubt about the language to send, more than one questionnaire was enclosed so that the respondent could choose the one that was easiest for him to complete, and, of course, regardless of the language employed in the questionnaire, the respondent could always use his own native one in replying.

envelopes addressed to Mr. Aseev at the Psychology Section of the Institute of Philosophy in Moscow were enclosed. In spite of these efforts, the response rates were low, and several Soviet social scientists suggested that the reason probably was that filling out and returning questionnaires is not yet a frequent and usual procedure in countries in the Soviet group.

Subsequent sections of this report describe the nature of program material at the Congress and the scientific information-exchange activities of the two groups of participants, Authors and Attendants. In addition to the findings for these overall groupings, many of the tables present a detailed breakdown in three geographical groupings: Group A, including participants residing in the USA and Canada; Group M, including those in the socialist countries of the Soviet group; and Group O, including all other participants not assigned to Groups A and M (most of whom resided in western Europe).

AUTHORS: THE WORK THEY PRESENTED AND THEIR INFORMATION-EXCHANGE ACTIVITIES AT THE CONGRESS

Nature and History of Presentations

Two types of presentations were predominant on the program of the Congress, the report of a laboratory or field study in which the author was personally involved (43%) and the review of a series of studies in all of which the author participated (43%). The emphasis placed upon these two types varied greatly among the three subgroups as Table 2 shows. Group O Authors reported single laboratory and field studies much

Table 2
NATURE OF PRESENTATIONS

Type	Percentage			
	All Groups N=214	Group A N=62	Group O N=121	Group M N=31
A report of a laboratory experiment or field study which author personally conducted or on which he collaborated	43%	26%	56%	29%
A review or synthesis of a series of studies in all of which author participated	43	53	36	48
A review or synthesis of a series of studies in only a part of which author participated	9	11	4	23
A review or synthesis of a series of studies in which author did not participate as an active researcher	1	0	2	0
Other	4	10	2	0

more often than did those in Groups A and M; the latter two groups more frequently presented reviews of a series of studies in all of which they had participated. More than half (53%) the presentations of all Author groups taken together were reviews of the various types appearing in Table 2.

Table 3 presents the data on the dates of inception of work in single studies and the dates of inception of both the earliest and most recent studies of a review series. The table also shows the median times at which the work in single studies and the most recent of a review series first reached a stage at which a report was possible. Although some of the medians are based upon Ns too small to yield a reliable average, their inclusion affords a more detailed and complete picture of the time intervals involved in the development of presented work. Three trends are evident in these data. First, though review-type presentations include relatively old work, they also contain some which is more recent in inception and reportable at times more closely approximating the date of the Congress than is true of single laboratory or field studies. Second, comparison with a sample of contributed papers at a national psychological convention (1965 APA) shows that the program material at the international gathering was not substantially older on the average

Table 3

TIME INTERVALS INVOLVED IN REPORTED WORK

Types of Reports as Indicated by each Group	Median Time Prior to the Congress (in years and months)		
	Approximate Date of Inception of Work in Earliest Study of a Series	Approximate Date of Incep- tion of Work for Most Re- cent Study of a Series and for Single Research or Field Studies	Approximate Date at which Results of Most Recent Study of a Series or of Single Research or Field Studies First Became Reportable
Laboratory experiment or field study in which author was personally involved			
All groups		2 Yrs. 5 Mo.	10 Mo.
Group A		2 Yrs. 11 Mo.	9 Mo.
Group O		2 Yrs. 2 Mo.	10 Mo.
Group M		2 Yrs. 6 Mo.	1 Yr. 1 Mo.
Review of a series of studies in all of which author was personally involved			
All groups	4 Yrs. 11 Mo.	1 Yr. 9 Mo.	7 Mo.
Group A	5 Yrs. 8 Mo.	1 Yr. 1 Mo.	4 Mo.
Group O	4 Yrs. 1 Mo.	1 Yr. 7 Mo.	8 Mo.
Group M	10 Yrs. 7 Mo.	4 Yrs. 1 Mo.	1 Yr. 6 Mo.
Review of a series of studies in only a part of which author was personally involved			
All groups	4 Yrs. 11 Mo.	1 Yr. 8 Mo.	7 Mo.
Group A	3 Yrs. 9 Mo. ^a	1 Yr. 1 Mo. ^a	3 Mo. ^a
Group O	4 Yrs. 1 Mo. ^a	10 Mo. ^a	2 Mo. ^a
Group M	10 Yrs. ^a	2 Yrs. 11 Mo. ^a	1 Yr. 1 Mo. ^a

^aMedian based on N <10.

than that presented at the national meeting ¹⁰. Further, Authors in Group A tended to report more recent research in review-type papers at the Congress than did American authors at the national meeting. A substantial proportion of the most recent work in reviews on the Congress program was not "completed" until well after the closing date for submission of papers. Third, Authors in Group M reported somewhat older work, in relation to all three types of presentations depicted in Table 3, than did the other two groups. The data on the time intervals involved in work show that although reviews dominated the program of the Congress, such papers included relatively recent work, as current or more current than that reported at national meetings.

Pre- and Postmeeting Dissemination of Work Reported at the Congress

Three-fourths of the Authors had made reports prior to the Congress of the work they presented on that occasion. Oral reports were more frequent than written ones (61%, oral; 49%, written), and most Authors who reported their work in written form also reported it orally, four-fifths of those making written reports making oral ones as well. Tables 4-A and 4-B present these data and show that Authors in Group M not only more frequently reported their work orally or in written form but that they also were more likely to report their work on more than one occasion or in more than one written format than was true of the

Table 4-A
NUMBER OF PRECONGRESS ORAL REPORTS ON MATERIAL CONTAINED
IN CONGRESS PRESENTATIONS

Number	Percentage			
	All Groups N=214	Group A N=62	Group O N=121	Group M N=31
None	39%	35%	49%	6%
One	33	24	38	32
Two	17	23	7	45
Three	6	6	6	6
Four	2	5	1	3
Five	1	2	0	3
More than five	2	5	0	3

Table 4-B
NUMBER OF PRECONGRESS WRITTEN REPORTS ON MATERIAL CONTAINED
IN CONGRESS PRESENTATIONS

Number	Percentage			
	All Groups N=214	Group A N=62	Group O N=121	Group M N=31
None	51%	56%	55%	26%
One	33	26	36	35
Two	7	6	6	16
Three	4	5	2	10
Four	2	2	1	6
Five	1	2	1	3
More than five	1	3	0	3

¹⁰American Psychological Association Project on Scientific Information Exchange in Psychology. Innovations in scientific communication in psychology. APA-PSIEP Report #16, 1966, APA, Washington, D. C.

other two groups. Possibly, the greater number of pre-Congress reports in this group resulted from the work's being older in inception and initially reportable at dates further removed from that of the Congress thus allowing more time for its dissemination. Authors in Group A made substantially more oral than written reports of their work; in Group O the percentages making oral and written reports were more nearly equivalent. Group A Authors, like those in Group M, tended to make oral reports on more than one occasion.

The locations and audiences for pre-Congress oral reports of the material contained in presentations, depicted in Table 5, suggest that these occasions probably were not effective in widely disseminating the "same" information reported at the Congress. Most reports were made to specialized groups within an author's own country, and the average time at which they occurred was somewhat less than nine months before the Congress, an interval not apt to be sufficient for broad international diffusion. Authors in Groups O and M made relatively frequent reports outside their own countries. Most such reports in Group O were to small specialized audiences; in Group M, a small percentage of Authors made repeated reports of their work, many of which occurred several years prior to the Congress and were usually made at gatherings outside the Soviet group. The audiences for about a fourth of the reports made in all groups taken together consisted primarily of persons in disciplines other than psychology and could easily have been overlooked by the international community of psychologists.

Although prior written reports of material contained in Congress presentations were less frequent than prior oral ones, a large proportion of these reports commanded a wide potential audience. The 214 Authors produced 81 journal articles, seven books, and ten parts of books which included at least some of the material they presented at the Congress and which were published on the average more than a year before it. These Authors also issued 51 other reports of various types, such as technical reports, theses, booklets, etc., which were of limited distribution and unlikely to reach extensive audiences. Table 6 presents these data. Though a majority of the pre-Congress written reports were potentially available to the international community of psychologists, most were published in an author's own country and tended to deal with older work, for example, that included in review presentations.

Prior dissemination of the material contained in Congress presentations tended to be greater than was the case for large psychological meetings in the USA; not only had a larger proportion of Congress Authors made some prior report of their work but the prior oral reports were considerably more frequent for Congress material. Such reports were typically relatively recent in occurrence and made to local, specialized gatherings. Pre-Congress written reports appeared in archival media, such as journals, books, and proceedings, more than twice as often on the average than was true in relation to national psychological meetings in the USA.

Both the papers which were scheduled for presentation and those which were scheduled for "discussion only" were published in a number of bound volumes and made available on a selective basis at the beginning of the Congress. Each volume contained the papers related to a certain general subject-matter category and participants could choose a maximum of four volumes on topics of greatest interest to them. Additionally, three volumes of abstracts of papers were distributed to most participants. Unfortunately, because of the large attendance, the supply of certain volumes was depleted shortly after the beginning of the meeting. The plan for wide dissemination of the material included in the Congress program was a good one and it is regrettable that the supply of proceedings volumes was so rapidly exhausted and that the vast majority of them can no longer be obtained except from the private shelves of those psychologists who attended the Congress¹¹ (the volumes are also no longer available for distribution in Moscow). Unless Authors publish some type of archival report of the material they presented at the Congress, most of the international population of psychologists will have access to it only through informal channels. More than three-fourths (77%) of the Authors, however, had specific plans for future publication of their work, and another 14%, though having no definite publication plans at the time they responded to the survey, expected some eventual future publication. Table 7 shows the formats for the definitely planned reports. More than three-fourths of the presentations were to be published as books, parts of books, or journal articles; in other words, about 90% of those Authors who had specific publication plans chose archival outlets for their

¹¹Although there is as yet no systematic study of this problem, a number of cursory inquiries have not revealed any libraries in this country having copies of these volumes on deposit.

Table 6
OUTLETS FOR PRECONGRESS WRITTEN REPORTS OF MATERIAL IN PRESENTATIONS^a

Format	Percentage ^b			
	All Groups N=159	Group A N=41	Group O N=67	Group M N=51
Journal article	51%	41%	45%	67%
Book	4	7	1	6
Part of book	6	5	4	10
Technical report, memo, etc.	21	29	30	4
Proceedings article	6	7	6	6
Thesis	8	5	12	4
Monograph/booklet	3	5	1	4

^a The publication source of the vast majority of prior written reports was located in an author's own country. Group A Authors made 41 reports, only one of which was published outside the Author's own country (an article in a British journal); Group O made 67 reports, only four of which were published outside Authors' respective countries (one appeared in a Soviet journal); and Group M made 51 reports, four of which appeared in media of countries other than an author's own (and two in countries outside the Soviet group).

^b Since some Authors made more than one prior written report, the percentages in this table are based on the total number of prior written presentations for which format was specified.

work. Most other types of written dissemination planned constituted a second redundant report prepared for a more restricted audience. For example, 16% of the Authors in Groups O and M intended to report the material they had presented at this international meeting in theses or dissertations, a finding in accord with the European educational tradition in which the thesis or dissertation is regarded as a product of major importance, though it is a medium seldom well monitored from the scientific communication point of view.

Most Authors who reported specific plans for future publication of the material they presented, in contrast to those anticipating some tentative eventual dissemination, had started preparation of a manuscript

Table 7
AUTHORS' SPECIFIC PLANS FOR FUTURE PUBLICATION OF THEIR PRESENTED WORK

Format ^a	Percentage			
	All Groups N=214	Group A N=62	Group O N=121	Group M N=31
Book or part of book	24%	21%	17%	55%
Dissertation or thesis	12	2	17	10
Monograph	5	5	5	6
Journal article	47	56	46	32
Paper within volume of collected papers ^b	3	3	3	3
Proceedings (other than Moscow Congress)	2	6	1	0
Technical/Memo report	<1	2	0	0
Other	1	2	2	0

^a Some Authors had plans to publish in more than one format.

^b Published by Author's own institution.

prior to responding to the survey, and many had even submitted the manuscript for publication by the time they responded. The selected journals constituted a varied group with something of an international flavor in that roughly a fourth (23 of 101) were published in countries other than those of the submitting authors. This aspect of post-Congress dissemination differed greatly from pre-Congress publication, since only nine of 159 premeeting reports were published outside an author's own country. Possibly, an international meeting stimulates and increases, through invitations, suggestions, or the discovery of new outlets, the archival dissemination of scientific information at the international level.

Among the 14% of the Authors who did not report specific publication plans but who did expect some eventual dissemination of the main content of their presentations the typical formats planned were the journal article or book. The reasons given for not publishing immediately after the Congress pertained in almost all instances to the development of a more comprehensive report including, in addition to material presented at the Congress, the collection of additional data, the incorporation of ongoing or planned work, further or different analyses of data, and other such addenda.

The data on publication plans indicated that within the year following the Congress most of the research presented there would be available in some public or archival form. Retrieval of such information on an international scale could still present a problem; however, one important function of such meetings may be to alert the international psychological science community to forthcoming publications not only of the presented work but of other relevant work by the same authors. A subsequent section of this report presents data on the extent to which this meeting performed such a function.

Information Exchange and Meeting Effectiveness as Reported by Authors

Only two of the 214 Authors presented work at the Congress in which they had not been personally involved as researchers and most had been engaged in such work for a number of years. The median date of inception of work in review-type reports (of a series of studies in all of which the Author participated) was roughly five years, and for many Authors such involvement was of much longer duration. Typically, Authors were not newcomers to the fields of their presentations and some familiarity with their past work on the part of other participants could be expected. One function of an international congress is to afford authors an opportunity to bring to the attention of their colleagues information concerning their more recent, on-going work. Eighty-nine percent of the Authors in this sample indicated such current professional activities at the time of the survey and for 86% of them some aspect of research — its conduct, planning, or supervision — was the type of current involvement indicated. About a fourth (27%) were teaching courses in the areas of their reported work. Table 8 presents these data and shows few differences in the patterns of activity among the three subgroups. Group O was somewhat less involved in the conduct and supervision of research and in teaching than were the other two, and Group A reported little involvement in clinical or applied work. Group M showed consistently high overall activity and with one exception reported greater involvement in each category of work than did either of the other groups.

Twenty-eight percent of the Authors modified their current work in the same areas as their presentations as a result of the interaction stimulated by the making of a presentation. Table 9-A depicts the

Table 8

AUTHORS' SCIENTIFIC ACTIVITIES IN SAME SUBJECT-MATTER AREAS AS THEIR PRESENTATIONS

Current Activities in Area of Presentation	Percentage			
	All Groups N=214	Group A N=62	Group O N=121	Group M N=31
Conduct of research	71%	87%	60%	81%
Research planning	34	26	32	58
Directing or supervising research	33	42	26	45
Involved in clinical or applied work	14	3	12	45
Teaching course	27	35	20	35
Other activities	4	5	2	10

Table 9-A
ACTIVITIES MODIFIED IN AREA OF AUTHORS' PRESENTATIONS

Activity	Percentage of Authors Modifying their work ^a
Conduct of research (N=152)	27%
Research planning (N=73)	36
Directing or supervising research (N=71)	23
Clinical or applied work (N=31)	16
Teaching course (N=57)	28
Other (N=8)	38

^aThe percentages in this column are based on the number of Authors involved in a given activity.

activities affected, and Table 9-B, the nature of the modifications¹². The principal activity modified was research planning, indicated by 36% of the Authors who reported this type of involvement. Roughly a fourth of those conducting research and a fourth of those supervising it reported some effect upon their work as a result of Congress interaction related to the papers they presented. Though relatively few Authors were teaching a course relevant to the work they presented, more than a fourth of those so involved modified this activity. For the most part the modifications reported were of such a nature as to produce substantial changes in the affected work. The most frequent one (Table 9-B) pertained to the initiation of new types of work or the introduction of new procedures, materials, and techniques. The most usual modification of teaching was the inclusion of newly discovered information or of colleagues' findings in the subject matter

Table 9-B
NATURE OF MODIFICATIONS

Modification	Percentage of All Modifications Reported by Authors N=106 ^a
Broadening scope of work	12%
Initiation of new type of related effort or introduction of new procedures, materials, techniques, apparatus, etc.	37
Clarification of some technical aspect of work	4
Expansion of effort (including collection of new or additional data and collaborative efforts.)	14
Alteration of some specific aspect of work (e.g., measures, controls, theory, etc.)	8
Incorporation of newly discovered information	11
Change in emphasis (including strengthening of own basic ideas)	14

^aThe 214 Authors reported a total of 106 modifications of their activities; the percentages in this column are based on the total number of modifications.

¹²Since more Authors were involved in some activities than others and since Authors described modifications in relation only to those activities in which they were engaged at the time of the survey, the percentages in Table 9-A are based on the number of Authors reporting each activity.

of the course. Two types of modifications reflect changes in general orientation rather than in specific details of work; for example, broadening the scope or changing the emphasis of work. Appendix D presents a more detailed breakdown of these data and relates types of modifications to the activities modified. The patterns of modification were much the same for Groups A and M. Group O deviated somewhat from the trends apparent in the other two groups; for example, this group effected few modifications of teaching in comparison to Authors in Groups A and M.

Nineteen percent of the Authors reported the modification of activities not directly related to the subject matter of their presentations as a result of the interaction they stimulated. Table 10 shows the nature of these modifications. Research was the activity typically affected, but on the whole the modifications

Table 10
AUTHORS' MODIFICATIONS OF WORK IN AREAS NOT REPRESENTED BY THEIR PRESENTATIONS

Nature of Modifications	Percentage of All Authors N=214
Reinforcement, stimulation of effort	2%
Redirection of effort, change in emphasis or direction of goals of work	2
Incorporation of data, results, specific information, etc.	1
Adoption, application, replication, etc. of methods and techniques	4
Ideas for new work or to broaden the scope of one's effort	3
Facilitation or enhancement of the value of one's work	3
Theoretical or orientational	1
Consideration of certain factors, effects or implications not previously included or sufficiently studied	1
Redirecting attention to certain factors, mechanisms, or processes relevant to one's work	2
Not clearly indicated	2

tended to be more general than those pertaining to directly related work (shown in Table 9-B). The findings on modifications of both directly related and other work show that a substantial number of Authors in all three groups derived useful information having definite impact upon their current work from interaction related to their presentations at the Congress.

A second important effect of Congress participation, in addition to the acquisition of information applicable to on-going work, was the development or extension of informal networks of communication. Nearly three-fourths (73%) of the Authors indicated that they either had established or planned to establish some continuing information-exchange relationship with other Congress participants who had discussed their presentations with them, and one-third of those Authors who planned such continuing interaction had not been aware, prior to the Congress, of the work of those with whom they planned it. Clearly, the meeting served an alerting function for this group of respondents and provided them with an opportunity to establish new networks of informal communication. The types of information they anticipated as a result of continuing interaction appear in Table 11. This information varied from the very specific, such as details about a procedure, to more general types, such as current developments in an area of interest. The interactive, reciprocal nature of the planned relationships emerges in six categories in Table 11 which account for nearly half of all the types of information exchange described by Authors; these categories pertain to the seeking of reactions to and criticisms of one's work and to mutual exchanges of reports of work and points of view.

Table 12 depicts the international scope of the information-exchange network initiated at the Congress. Thirty-seven of the 44 nations represented by Congress participants appear in the table, though the host

Table 11
INFORMATION ANTICIPATED THROUGH CONTINUING INTERACTION

Type of Information	Percentage ^a			
	All Groups N=157	Group A N=55	Group O N=75	Group M N=27
Exchange of data, general findings, information on current activity or future research plans	16%	29%	7%	15%
Obtain <u>specific</u> data and findings	16	25	15	0
Acquire information on procedures, methods, techniques, etc.	20	15	24	19
Obtain general data or current information on subject of interest ^b	23	18	23	33
Seek information on practical procedures and applications	3	5	1	0
Exchange or acquire copies of reports, preprints, reprints, etc.	18	11	16	41
Establish mutual discussion of subject, exchange viewpoints, etc.	4	5	5	0
Obtain reactions to or criticisms of own work	5	7	5	0
Discuss general experiences with research in same area	1	2	1	0
Send reports of own and colleagues' work (existing and future)	1	2	0	4
More explication of theory, exchange of theoretical interpretations	7	4	12	0
Obtain leads on publications not disseminated in own country	3	2	4	0
Other (Russian-English dictionary of psychological terms, exchange visits)	2	2	1	4

^aPercentages are based on the number of Authors who reported plans for exchanging information. Some Authors in each group specified more than one type.

^bUsually reportedly unavailable in respondent's own country.

Table 12
NATIONALITY OF PERSONS WITH WHOM AUTHORS PLAN TO CONTINUE
INTERACTION INITIATED AT CONGRESS

Country	Percentage			
	All Groups N=214	Group A N=62	Group O N=121	Group M N=31
<u>Europe</u>				
Belgium	2%	2%	2%	3%
Bulgaria	3	3	2	6
Czechoslovakia	12	16	8	19
Denmark	5	5	2	19
Federal Republic of Germany	14	10	11	32
Finland	<1	2	0	0
France	22	11	16	55
German Democratic Republic	3	3	1	13
Hungary	5	6	2	10
Italy	3	5	1	6
Lithuania	<1	0	1	0
Netherlands	10	15	6	16
Norway	2	6	1	0
Poland	12	19	6	23
Romania	3	6	0	6
Spain	<1	0	0	3
Sweden	4	8	2	0
Switzerland	1	0	1	3
United Kingdom	27	29	21	48
USSR	54	76	39	68
Yugoslavia	1	3	0	3
Other	1	3	0	0
<u>Western Hemisphere</u>				
Brazil	1	0	0	6
Canada	13	8	11	32
Chile	<1	0	1	0
Colombia	<1	0	1	0
Cuba	<1	0	0	3
Mexico	3	3	2	3
Uruguay	<1	2	0	0
USA	40	24	39	77
<u>Near and Far East and Other</u>				
Australia and New Zealand	5	10	3	3
India	3	2	2	6
Iran	<1	2	0	0
Israel	2	2	2	3
Japan	12	11	7	32
Singapore	<1	2	0	0
Zambia	<1	0	1	0

country (USSR) and the USA (the two countries having the largest number of Congress participants) are clearly predominant. Two trends are common to Groups A and M: (a) high percentages planning to continue information-exchange relationships begun at the Congress (89%, Group A; 87%, Group M), and (b) emphasis upon one another in the establishment of such relationships; in other words, 76% of the Group A Authors planned continuing information exchange with participants residing in the USSR, and 77% of the Group M Authors planned such relationships with participants located in the USA. Authors in Group O did not greatly emphasize participants in either Group A or Group M in the initiation of information exchange; nor did the USA and Soviet group Authors frequently pursue interaction with participants in the countries represented by Group O Authors. The data on information-exchange relationships emphasize the breadth of the informal communication network and suggest the potential role of international meetings in developing further and facilitating the operation of such networks.

The data on requests that Authors received either for copies of their presentations or for further information on their reported work afforded additional evidence of the broad range of contacts resulting from Congress participation. Though nearly two-thirds (63%) of all the Authors received such requests, the percentages for the three subgroups varied greatly — 77% in Group A, 48% in Group O, and 90% in Group M. Requests came from participants located in 39 of the 44 countries represented at the Congress (Table 13). The high percentages of Authors in Groups A and M who received requests resulted largely from USSR participants' requests to Group A Authors and USA participants' requests to USSR Authors. The requests received by Group O Authors were more evenly distributed among countries, though participants in the USA and USSR still accounted for the highest percentages of requests. These findings together with those on the establishment of informal channels of communication (depicted in Table 12) suggest an increase in the flow of information between the USA and the USSR, the two countries that have most recently hosted the International Congress of Psychology (1963 and 1966 respectively).

PATTERNS OF INFORMATION EXCHANGE AMONG CONGRESS ATTENDANTS

Since the questionnaire used for Attendants was so organized as to allow them to respond to most of the questions in relation to one specific paper for which they were present at the time they were added to the sample, most of the findings in this section pertain to the information exchange stimulated by these papers.

Familiarity, Interaction, and Impact of Information on Attendants' Work

Although the Attendant group constituted a random sample each member of which responded in relation to only one presentation in a symposium and half of whom (49%) regarded another presentation in the symposium as more relevant to their work or interests, slightly more than half (53%) of them reported some prior knowledge of the work of the author of the presentation about which they were questioned. Most who reported such familiarity had read a report of other work conducted by the author or of the institutional program of which his work was a part. The written reports of Congress presentations (Proceedings volumes) were not the principal source of prior awareness of the work reported on this occasion, for a larger percentage (17%) had read a report of the work not prepared especially for the Congress than had read the printed copies of presentations (12%)¹³, as Table 14 shows. More than a tenth of the Attendants had heard authors make an oral report of their presented work on occasions other than and prior to the Congress, and about the same percentage had received information on the work from colleagues in their own and other institutions. The three subgroups differed in the emphasis they placed upon the various sources of awareness appearing in Table 14. Group A Attendants indicated substantially greater awareness of other work conducted by authors than was true of those in Groups O and M. Far more Group M Attendants had read a copy of the presentation (25%) than was true of Group A (7%) and Group O (10%), and they had also more often read other reports of the presented work not prepared especially for the Congress (31%, as compared to

¹³Discussions with a number of participants at the Moscow Congress suggest that international meetings are too eventful for even the most conscientious participants to be expected to read copies of presentations during the course of the meeting. These opinions when combined with the findings in Table 14 suggest that unless copies are distributed well in advance of the meeting they are of little more use to participants than postmeeting proceedings.

Table 13

PERCENTAGE OF AUTHORS RECEIVING ONE OR MORE REQUESTS FOR COPIES
OF OR INFORMATION ON THEIR PRESENTATIONS AND NATIONALITY OF REQUESTORS

Country	Percentage			
	All Groups N=214	Group A N=62	Group O N=121	Group M N=31
<u>Europe</u>				
Austria	1%	0	1%	3%
Belgium	1	0	2	0
Bulgaria	2	2%	1	10
Czechoslovakia	8	11	4	19
Denmark	4	6	2	6
Federal Republic of Germany	19	18	16	32
Finland	1	2	2	0
France	26	27	21	42
German Democratic Republic	6	5	2	19
Hungary	5	10	1	13
Italy	<1	0	1	0
Lithuania	<1	0	1	0
Netherlands	7	10	7	6
Norway	1	3	1	0
Poland	9	11	5	23
Romania	1	2	0	3
Spain	1	2	1	0
Sweden	4	8	3	0
Switzerland	1	0	2	0
United Kingdom	28	37	21	35
USSR	42	68	27	45
Yugoslavia	0	2	2	0
Other	<1	2	0	0
<u>Western Hemisphere</u>				
Brazil	1	0	2	3
Canada	12	10	10	23
Chile	<1	0	1	0
Mexico	2	3	2	0
Uruguay	<1	2	0	0
USA	36	35	31	58
<u>Near and Far East and Other</u>				
Algeria	<1	0	1	0
Australia and New Zealand	6	10	5	0
India	6	8	7	0
Iran	<1	2	1	0
Israel	5	5	7	0
Japan	9	13	5	16
Singapore	<1	2	0	0
South Africa	<1	0	1	0
Tunisia	<1	0	1	0
Turkey	<1	0	1	0
Zambia	<1	0	1	0

Table 14
NATURE OF ATTENDANTS' PRIOR ACQUAINTANCE WITH WORK OF AUTHORS
OF PRESENTATIONS THEY HEARD

Nature of Prior Acquaintance ^a	Percentage			
	All Groups N=284	Group A N=85	Group O N=134	Group M N=65
Had read written reports of other work conducted by author(s) or of the institutional program of which the reported work was a part	30%	42%	22%	34%
Had read a report of this work not specifically written for Congress	17	12	13	31
Had heard author(s) make an oral report of work on another occasion prior to the Congress	13	15	10	18
Had read written version of presentation	12	7	10	25
Had been informed of the work of the author(s) by a colleague from an institution other than own	7	9	4	11
Had been informed of the work of the author(s) by a colleague within own institution	4	0	3	12
Other	4	2	5	2

^aSome Attendants reported more than one type of prior acquaintance.

12% for Group A and 13% for Group O). Table 15 shows the extent to which the familiarity reported by Attendants resulted from contacts within their respective groups. Group A and Group M Attendants tended to be most familiar with the work of authors in their own groups; however, those in Group O reported greater familiarity with the work of authors in Group A than with those in their own group or in Group M. Even in the case of Groups A and M, which favor their own groups in such a comparison, familiarity is not excessively concentrated; more than half the Attendants in these groups reported previous awareness of the work of authors in each of the other two groups. An exception to the pattern of rather general familiarity occurs in Group O in which only 29% of the Attendants reported any prior awareness of the work of Group M Authors.

Table 15
ATTENDANTS' FAMILIARITY WITH WORK OF AUTHORS OF PRESENTATIONS THEY HEARD

Attendant Groups	Percentage of Attendants in a Group Reporting Familiarity with Work of Authors in Specific Groups ^a		
	Author Groups		
	Group A	Group O	Group M
Group A	71% (N=41)	53% (N=21)	52% (N=23)
Group O	62% (N=33)	44% (N=48)	29% (N=53)
Group M	59% (N=34)	64% (N=81)	78% (N=23)

^aThe percentage in each cell indicates the proportion of Attendants in a given group (rows) who reported familiarity with the work of Authors from a specific group (columns). The 71% in the first cell shows that 29 of the 41 Group A Attendants who heard presentations by Authors in Group A were familiar with the work of the Authors in this group.

Twenty-seven percent of the Attendants (Group A, 11%; Group O, 24%; and Group M, 51%) reported that in addition to hearing a presentation they either had had or were planning information exchange with an author about the reported work. Table 16 shows the nature and purposes of interaction with authors and indicates that such exchanges typically would supplement those which occurred at the Congress; for example,

Table 16
ATTENDANTS' INTERACTION WITH AUTHORS ABOUT THEIR PRESENTATIONS

Types and Purposes of Contact	Percentage			
	All Groups N=284	Group A N=85	Group O N=134	Group M N=65
Type of Contact^a				
Correspondence prior to Congress	3%	2%	1%	6%
Question from floor of paper session	1	0	1	5
Discussion with author at end of paper session	2	0	2	6
Discussion with author on another occasion at the Congress	5	2	4	9
Correspondence following the Congress	13	6	10	29
Planned face-to-face contacts with author (e.g., visit his lab)	3	3	3	3
Other	2	0	3	5
Purpose of Contact^a				
Clarify some point in the reported research	7	4	4	23
Request information not in report	7	6	7	17
Acquaint author with own work	7	4	4	23
Acquaint author with others' work	1	0	1	3
Request a copy of the paper	8	4	7	22
Request reports of future work	12	4	12	26
Obtain reaction to own work	9	2	9	21
Other	1	2	1	2

^aSome Attendants reported more than one type and/or purpose of making contact with authors.

correspondence following the meeting was a far more frequent category than either questions from the floor of a session or discussion with authors at a session or during the meeting. The three principal objectives of interaction were: (a) to get further information on reported work, i.e., clarification of some point (7%) or related information not included in a presentation (7%); (b) to maintain awareness of an author's ongoing and future work, i.e. request a copy of the paper (8%) or reports of future work (12%); and (c) to initiate a mutual exchange of findings and feedback, i.e., acquaint an author with one's own or others' work (8%) or obtain an author's reaction to one's own work (9%). Seventeen percent of the Attendants planned to maintain continuing future information exchange with authors whom they had contacted as a result of the Congress.

Four of each ten Attendants either had been or currently were involved in professional activities in the same subject-matter areas as the presentations about which they were questioned. The lowest percentage indicating involvement occurred in Group O (37%) and the highest in Group M (55%). All the activities pertained in some way to research — its conduct or the dissemination of its results, as Table 17 shows. Former involvement was characteristic of higher percentages in all the subgroups than was current or planned involvement. About two-thirds of the Attendants who had conducted research (related to presentations they heard) had also published a report of their work prior to the Congress.

Table 17

**ATTENDANTS' ACTIVITIES IN THE SAME SUBJECT-MATTER AREAS AS THE WORK
DESCRIBED IN THE SAMPLED PRESENTATIONS**

Activity in Area of Presentations ^a	Percentage					
	Previous Involvement			Current or Planned Involvement		
	Groups			Groups		
	A N=85	O N=134	M N=65	A N=85	O N=134	M N=65
Conduct of research	34%	22%	42%	8%	7%	15%
Presentation of oral report at a regional or national meeting	16	10	20	5	1	14
Publication of journal article	19	12	20	11	3	9
Preparation of proceedings article, monograph, technical report, etc.	6	5	6	1	3	6
Conduct of thesis, dissertation, or diploma work	4	10	5	0	4	5
Other	7	7	3	1	1	0

^aSome Attendants reported involvement in more than one area.

Few Attendants (10%) reported any major modification of their work in the same area as the presentation about which they were questioned as a result of the information it contained or of information received from the author. The activities modified and the nature and sources of modifications appear in Table 18. The activity typically modified was research; the most frequent type of modification was the use of new methods, techniques, or materials; and the principal source was the presentation itself — either hearing it or reading a copy. In addition to the modification of work directly related to presentations, Attendants also reported any effects of information derived from presentations or their authors upon other unrelated activities. Only 8% (Group A, 6%; Group O, 5%; and Group M, 13%) reported such modifications and, again, research was the activity to which they chiefly pertained. The modifications were much the same as those listed in Table 18.

Fewer than one-fifth of the Attendants indicated any effect upon their work as a result of contact with specific presentations or their authors; however, the data suggest that some presentations and the interaction they stimulated may yet lead to modifications in Attendants' work. Twenty-seven percent of the Attendants had obtained or were trying to obtain further information from an Author and only a third of these respondents reported any modification of their work at the time they took part in this survey. A look at the types of information sought by these nonmodifying Attendants who planned further information exchange with authors shows that most wanted additional data, details of experimental techniques or measurements, or more explicit information on particular aspects of the reported work. Those who had already effected modifications wanted to obtain reprints or preprints or to establish some continuing mutual exchange of information.

Overall Effect of Congress Attendance upon Work

When asked to consider the meeting as a whole and all interaction with other participants, 28% of the Attendants indicated that they had received information which would result in some major modification of their work. Table 19 summarizes these data. Research was the activity chiefly affected, 18% of the Attendants modifying such work; teaching and theoretical work were mentioned by 3% of the Attendants. The most frequently indicated modifications pertained to the utilization of newly discovered information to guide work in a different (and presumably unanticipated) direction; for example, new insights into old problems, utilization of new materials, techniques, or methods, or the initiation of new types of related effort. The typical source of the information resulting in modifications was presentations; however, when all informal sources are grouped together, the percentage indicating informal interaction is equivalent to the percentage attributing modifications to information received from presentations.

Table 18

MAJOR MODIFICATIONS IN ATTENDANTS' WORK IN SAME AREAS AS PRESENTATIONS

Activities Modified and the Nature and Sources of Modifications	Percentage			
	All Groups N=284	Group A N=85	Group O N=134	Group M N=65
<u>Activities modified</u>				
Research	7%	4%	3%	18%
Manuscript/publication plans	<1	0	0	2
Teaching	2	1	1	5
Clinical or applied work	1	0	1	2
Thesis	<1	0	0	2
<u>Nature of modification</u>				
Broadened scope of work	<1	0	0	2
New research plans	2	1	1	0
Clarification of some aspect of work	1	1	1	0
Use of new method, technique, materials, etc.	6	2	3	15
Change in emphasis/point of view	1	0	0	5
Other	<1	0	0	2
<u>Sources of modifications</u>				
Presentations (oral)	6	4	4	14
Written copy of presentations	4	0	1	12
Informal (personal) contacts	1	0	1	5
Other or unspecified	1	0	0	3

How effective was the Congress in disseminating scientific information of value and use in the current and future professional work of Attendants? More than two-fifths (42%) reported some major modification of their work as a result of some aspect of meeting participation — a specific presentation in relation to which they responded, other presentations, or informal interaction. Exactly half the Attendants reported either some modification of their work or further information exchange with authors that had potential implications for their work. When we recall that these effects include only those reported within a few months of the Congress and that they are characteristic of respondents in all three subgroups and therefore represent psychologists from all parts of the world, we conclude that scientific information exchange at this Congress had a substantial impact upon the work of psychologists throughout the world and upon informal information exchange among them. The effect was greatest for Attendants in Groups A and M; Group O Attendants consistently reported less involvement, interaction, and impact than did the other two groups.

INFORMATION-EXCHANGE ACTIVITIES AND COMMUNICATION PROBLEMS AT THE CONGRESS

A Diagrammatic Description of Scientific Information Exchange in Relation to Presentations

Figure 1 diagrams the flow of information pertaining to presentations and interrelates the scientific communication activities of Authors and Attendants in relation to these presentations. The bracketed numbers in this section refer to activities numbered in the body of the figure. Authors' earlier work in the same areas represented by their presentations appears at the top of the diagram [1]. Data on Attendants indicated that 45% of the persons hearing a presentation were in some way familiar with this earlier work though not necessarily with that which was included in the Congress presentation [2]. Moving down the diagram, we find that 75% of the Authors had made some report of the material contained in their presentations

Table 19
MAJOR MODIFICATIONS IN ATTENDANTS' WORK RESULTING FROM INFORMATION
RECEIVED AT THE CONGRESS^a

Activities Modified and the Nature and Sources of Modifications	Percentage			
	All Groups N=284	Group A N=85	Group O N=134	Group M N=65
<u>Activities modified</u>				
Research	18%	16%	13%	31%
Teaching	3	1	1	11
Manuscript/publication plans	2	1	1	5
Clinical or applied work	2	1	1	5
Theoretical work	3	0	3	6
General scientific approach to psychology	1	0	0	3
Unspecified	1	0	0	5
<u>Nature of modifications</u>				
New insight into old problems	3	1	1	8
Use of new materials, techniques, methods, etc.	12	11	8	23
Change in emphasis/point of view, etc.	2	2	1	5
Clarification of some aspect of own work	4	1	4	9
Initiate new type of related effort	2	4	0	3
Collaborative effort with another Congress participant	1	1	1	0
Theory construction and interpretation	2	1	2	2
Intensify present effort (collect more data, broaden scope, etc.)	1	0	0	6
Attempt to replicate work	<1	0	0	2
Change in attitude and manner of reporting work	<1	0	0	2
Unspecified	3	1	1	5
<u>Sources of modifications^b</u>				
Presentation (oral)	14	11	7	31
Session discussion	6	1	1	23
Informal (personal) contacts	8	9	3	15
Written copy of presentation	3	2	1	9
Visit to laboratory	3	2	2	5
Exhibit of apparatus	1	0	1	2
Unspecified	2	0	1	6

^aInformation received from Congress as a whole and any interaction with other Congress participants other than that resulting from the specific paper in relation to which an Attendant responded.

^bSome Attendants reported more than one source.

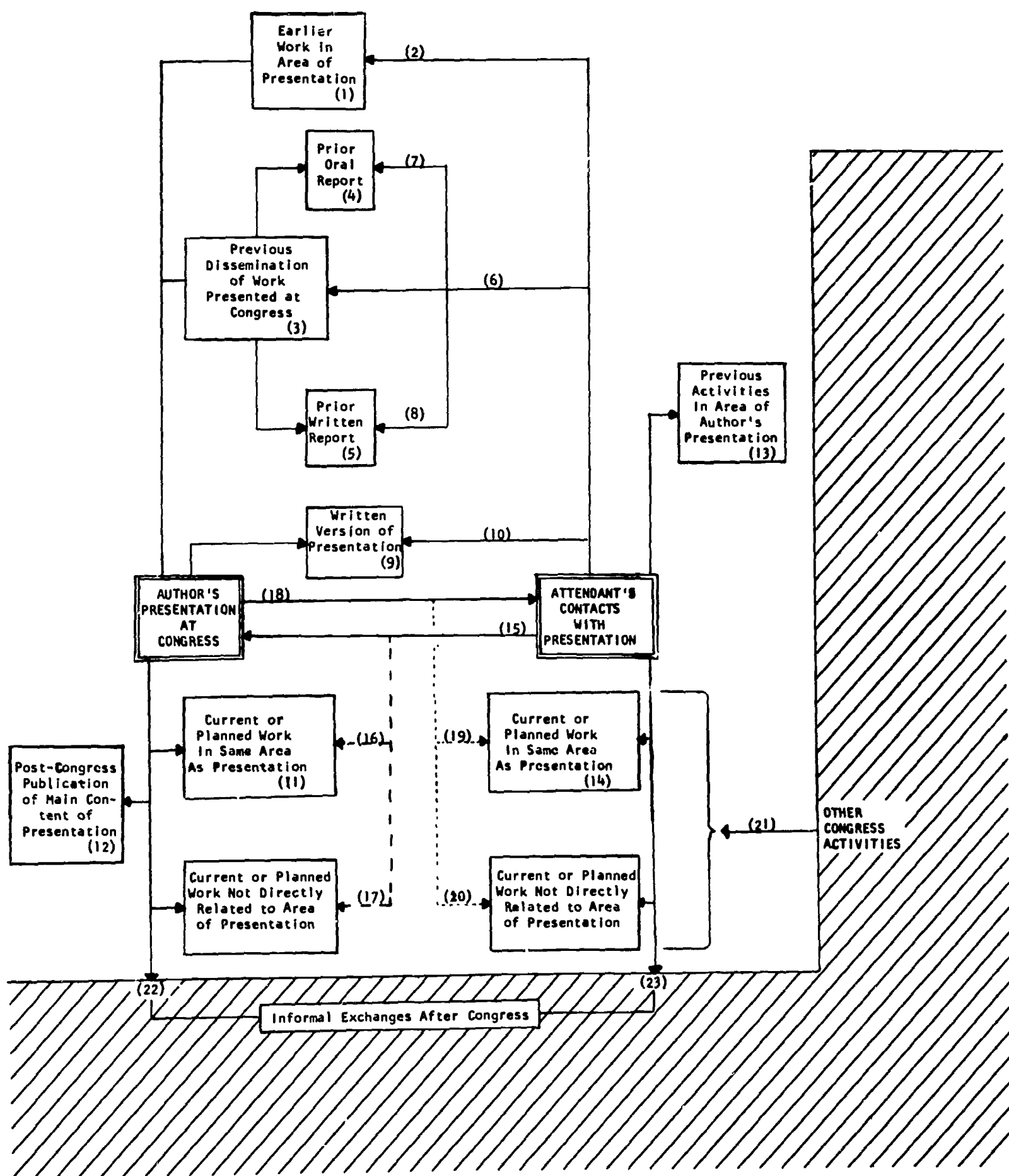


Figure 1: Diagrammatic description of the scientific information-exchange activities surrounding presentations made at the XVIIIth International Congress of Psychology

prior to the Congress [3], 61% in oral [4] and 49% in written [5] form. Thirty percent of the Attendants indicated some prior acquaintance [6] with the specific work described in presentations they heard; 13% had heard the Author make a previous oral presentation [7], and 24% had read a written report [8]. Although written versions of presentations [9] were distributed (on a limited basis) at the Congress, only 12% of the Attendants had read a copy of the presentation in relation to which they responded [10]. At the time of the Congress 89% of the Authors were engaged in professional activities in the same areas as those upon which they reported [11], and 77% had specific plans for publishing the content of their presentations [12]. To the right in the diagram the activities of Attendants in the same subject-matter areas as those of presentations they heard appear; 40% had worked in the area in the past [13], and a fourth (26%) had current related responsibilities or were planning relevant work [14]. The dashed and dotted lines in the lower part of the figure represent the effect upon Authors' and Attendants' ongoing work of information obtained at the Congress. Nearly three-fourths (73%)¹⁴ of the Authors discussed the work they reported with other participants [15] and as a result of such interaction 28% of them modified their directly related on-going and planned work [16] and 19%, other less relevant work [17]. All Attendants, of course, heard the presentations in relation to which they responded and more than a fourth of them (27%) initiated some additional information exchange with these Authors [18]. Information contained in presentations or received from their Authors caused 10% of the Attendants to modify their directly related work [19] and 8%, to modify their work in other areas [20]. Thus far the description of information exchange and its effects has dealt only with the data on the sample of presentations included in this study; however, Congress participants heard other presentations and had other types of interaction at this meeting. Some indication of these other information-exchange activities appears in the shaded area to the right of and below the main portion of the diagram. Twenty-eight percent of the Attendants received information through other activities at the Congress (other papers and informal contacts) which resulted in major modifications of their ongoing and planned work [21]. Three fourths (73%) of the Authors intended to maintain continuing future information exchange with persons to whom they had talked about their work at the meeting [22], and 17% of the Attendants planned to maintain contact with Authors with whom they had interacted at the Congress [23].

What the foregoing data on pre- and post-Congress involvement, Congress interaction, and the effects of information received at this meeting chiefly show is:

1. That most Authors had reported work included in their presentations prior to the Congress but that less than a third of the Attendants had made contact with such reports though two-fifths of them had a background of previous work involvement in relevant areas;
2. That at least three-fourths of the Authors and somewhat more than a fourth of the Attendants interacted at the Congress about the work reported on this occasion, and that 73% of the Authors and 17% of the Attendants found such interaction of sufficient worth to attempt to maintain contact in the future;
3. That nine-tenths of the Authors and a fourth of the Attendants had current professional involvement in the areas of reported work and that information received from presentations or through interaction about them resulted in modifications of work for more than a fourth of the Authors and a tenth of the Attendants;
4. That a fifth of the Authors and less than a tenth of the Attendants modified other less relevant work as a result of information in specific presentations, and that more than a fourth of the Attendants reported some effect on their work resulting from aspects of Congress attendance other than the specific presentations about which they were questioned.

Clearly, Authors were far more active professionally, particularly in the conduct and dissemination of research, than were Attendants, and their participation in the meeting was more rewarding in terms of utilization of information in work and the establishment of informal channels of communication than was true of Attendants.

¹⁴This percentage refers only to those Authors who planned to continue information exchange after the Congress with persons who had talked with them about their work at the meeting; therefore, it probably represents an underestimate.

Communication Problems at the Congress

Table 20 depicts the nature of the communication problems encountered by participants at the Congress and which they felt that some effort should be made to correct. These comments appear in the form of positive suggestions in order to be of greater use to the IUPS in planning future international congresses. One of each five participants suggested that scientific information exchange at international meetings would be enhanced by better methods of distributing copies of presentations or by improving the mechanics of presentation. More than a third, who considered the general conduct of sessions poor, advocated such improvements as more time for discussion of presentations and better audiovisual aids¹⁵. Approximately half the participants felt that the organization and general format of the Congress should be changed. Among the most frequent comments were the advisability of restricting attendance in some way and the need for formal (scheduled) arrangements for small meetings of persons working in specific areas, the purpose of such meetings being to facilitate informal discussion of common problems and interests. Although participants freely discussed their dissatisfaction with accommodations at the Congress, most of them did not regard this type of difficulty as a major deterrent to scientific information exchange. Only 10% described communication difficulties directly attributable to accommodations and the main problem was the virtual impossibility of locating other participants since they were widely dispersed around Moscow and there was no convenient, up-to-date list of participants' lodgings. One of the greatest difficulties encountered was language. Thirty percent of the participants reported problems associated with language and, not unexpectedly, those in Group A most frequently did so. About a fourth of the participants indicated that the simultaneous translations were poor or impossible to follow. Several stated that they gave up trying to follow presentations in some languages; for example, French to English or English to French were apparently extremely confusing when mediated through interpreters whose native language was Russian. Some suggested that interpreters be available to facilitate informal, face-to-face discussion among scientists with common interests. Nearly a tenth of the participants offered suggestions not pertaining to this particular Congress; for example, that additional international meetings each devoted to a special research area should be scheduled.

SCIENTIFIC INFORMATION-EXCHANGE ACTIVITIES EXTRANEOUS TO CONGRESS PARTICIPATION

In addition to data on participation in an international meeting, the questionnaire yielded data on two other international aspects of scientific communication — the languages scientists use in their work and their work-related foreign travel. Table 21 (parts A, B, and C) presents the data on utilization of the four major scientific languages, English, French, German, and Russian, and Appendix E (parts 1 and 2) shows all languages used by participants. English was the predominant one among these psychological scientists; 97% had a reading knowledge of it, 46% as a native language and 51% as a second language. Among those participants who did not have English as a native language, 93% could read English and 84% had read some scientific work in this language during 1966. Findings for the other three principal languages show that 66% of the participants could read French (12% as a native language and 54% as a second language), 48% could read German (6% as a native and 42% as a second language), and 21% Russian (8% as a native and 13% as a second language). Among those participants who did not have French, German, and Russian as native languages the use of these languages in 1966 was less than the reported use of English (French, 38%; German, 24%, and Russian, 10%). These data show that participants in this Congress not only more often had a reading knowledge of English but that English was the language they most frequently used when they consulted scientific literature in a language other than their native one.

The journal article was the type of literature chiefly used, more than 50% of the reports that were read being in this format. Books accounted for a third of the material, and informal reports of various types, for 10%. Group A emphasized journal articles in their reading and indicated fewer books than did the

¹⁵Difficulties with audiovisual aides typically represented a combination of problems; for example, there was a lag between a speaker's statements and the interpreter's translation and, since slides were paced by the speaker, they were often removed before the interpreter had completed the translation or interpretation of the material they contained. Some who had but one earphone found themselves listening to the speaker with one ear and the interpreter with the other.

Table 20

**SCIENTIFIC COMMUNICATION PROBLEMS ENCOUNTERED AT THE CONGRESS AND SUGGESTIONS FOR IMPROVING SCIENTIFIC
INFORMATION EXCHANGE AT FUTURE INTERNATIONAL MEETINGS**

Comments and Suggestions	Percentage							
	Authors ^a				Attendants			
	All Respondents N=467	Both Groups N=183	Group A N=62	Group O N=121	All Groups N=284	Group A N=85	Group O N=134	Group M N=65
Papers Presented								
<u>Distribution of Copies of Presentations</u>								
Prior to meeting	7%	5%	0	8%	9%	13%	4%	14%
At meeting—adequate number of fully translated copies available to all participants	1	2	0	3	0	0	0	0
Total	8	7	0	11	9	13	4	14
<u>Presentation</u>								
Improve author's manner of presentation (e.g., eliminate reading)	4	4	5%	4	4	7	3	0
Improve quality (e.g., screen before acceptance)	1	2	2	2	1	2	1	0
Improve author's use of tables, diagrams, graphs, etc.	1	1	0	2	<1	0	1	0
Standardize terminology	3	3	2	4	2	5	2	0
Eliminate "politicizing"	1	1	2	1	<1	0	0	2
Total	10	11	11	13	8	14	7	2
Paper Sessions								
<u>Procedure</u>								
Make chairman responsible for providing continuity between authors and audience	<1	1	0	1	<1	0	1	0
Inform author of time allowed for presentation and enforce limits	2	3	0	4	1	0	1	3
Provide for more time for discussion of presentations	10	12	11	12	8	4	11	9
Eliminate formal oral presentations; substitute discussion of papers distributed prior to Congress	1	2	2	2	0	0	0	0
Reduce number of papers per session	5	6	6	6	4	1	7	2
Restrict subject matter to research with emphasis on "current" work	4	3	2	4	5	7	3	6
Restrict participation (e.g., invited papers only)	<1	1	3	0	0	0	0	0
Total	23	28	24	29	19	12	23	20
<u>Content</u>								
Concentrate on core areas of psychology	3	0	0	0	5	1	4	11
De-emphasize reviews, insist upon reports of current work	1	1	3	0	1	0	2	0
Emphasis should be placed on "trend reports"	1	2	0	3	0	0	0	0
Total	5	3	3	3	6	1	6	11

(Continued on next page)

Table 20 (continued)

Comments and Suggestions	Percentage						
	Authors ^a			Attendants			
	All Respondents N=467	Both Groups N=183	Group A N=62	Group 0 N=121	All Groups N=284	Group A N=85	Group 0 N=134
Facilities							
Better audiovisual aid facilities	7%	4%	11%	1%	10%	16%	10%
Total	7	4	11	1	10	16	10
Congress in General							
Organization							
Attempt better planning in general	5	1	0	1	7	13	5
Reduce lead time for submission of papers in order to allow for more current work	<1	1	2	0	0	0	0
Improve "program" and distribute well in advance of meeting	2	3	2	4	2	1	2
Eliminate conflicting sessions of same or closely related subject matter	1	1	0	2	1	2	0
Seek better representation (on program) of all countries	1	1	0	2	1	2	2
Announce publicly, and well in advance of meeting, how papers should be submitted	3	8	4	9	1	0	0
Total	13	15	8	18	12	18	9
Format							
Provide for more opportunity for informal discussions (e.g., conversation hours)	13	10	18	6	15	24	8
Restrict size of attendance (e.g., discourage tourism)	9	11	16	9	7	9	0
Arrange for small meetings of persons working in specific area	9	6	10	4	10	12	6
Have more sessions per day	1	1	0	2	<1	0	0
Separate ideological discourses from science	1	0	0	0	1	1	2
Increase duration of meeting	1	1	0	1	0	0	0
Enlarge on theme of Congresses	<1	0	0	0	<1	0	2
Total	34	29	44	22	34	46	18
Accommodations							
Arrange for better accommodation facilities	1	3	8	0	<1	0	0
Concentrate living quarters conveniently near meeting rooms	1	1	2	1	1	4	0
Facilitate locating of participants (e.g., up-to-date list of participants' hotel rooms)	8	7	3	8	9	7	0
Total	10	11	13	9	10	12	0

(Continued on next page)

Table 20 (continued)

Comments and Suggestions	Percentage							
	Authors ^a				Attendants			
	All Respondents N=467	Both Groups N=183	Group A N=62	Group 0 N=121	All Groups N=284	Group A N=85	Group 0 N=134	Group M N=65
<u>Language Difficulties</u>								
Improve simultaneous translations	22%	23%	29%	20%	22%	41%	19%	3%
Establish a universal scientific language	1	3	2	3	0	0	0	0
Extend simultaneous translations to work shops, research meetings, etc.	1	1	0	2	1	2	1	2
Provide for interpreters for informal, person-to-person discussion	3	4	5	3	3	6	1	2
Publish abstracts of presentations in <u>all</u> major languages prior to meeting	2	1	2	0	4	4	4	3
General improvement of difficulties associated with language barriers	<1	0	0	0	<1	0	1	1
Total	30	32	38	28	30	53	26	11
International Meetings in Addition to International Congress of Psychology								
Hold additional meetings devoted to special research areas	8	8	3	11	8	6	11	6
Hold regional "international" meetings during off years	1	1	2	3	0	0	0	0
Total	9	9	5	14	8	6	11	6

^aDue to length of Russian version of questionnaire items relating to communication problems were eliminated.

Table 21-A
AUTHORS' USE OF MAJOR SCIENTIFIC LANGUAGES^a

Language	Percentage of A Authors N=62				Percentage of O Authors N=121								Percentage of All Authors N ^c	
	Native	Reading Knowledge ^b	Current Teaching ^b	1966 Scientific Reading ^b	Native	Reading Knowledge ^b	Current Teaching ^b	1966 Scientific Reading ^b	Native	Reading Knowledge ^b	Current Teaching ^b	1966 Scientific Reading ^b	Reading Knowledge ^b	1966 Scientific Reading ^b
English	95%	5%	5%	2%	31%	67%	15%	62%					98%	88%
French	3	66	2	39	26	56	7	42					73	50
German	0	45	0	23	11	38	5	23					44	25
Russian	0	13	0	8	0	9	1	8					10	8

Table 21-B
ATTENDANTS' USE OF MAJOR SCIENTIFIC LANGUAGES

	Percentage of A Attendants N=85				Percentage of O Attendants N=134				Percentage of M Attendants N=65				Percentage of All Attendants N ^d	
English	95%	5%	2%	1%	26%	72%	19%	66%	0	82%	8%	74%	91%	82%
French	2	55	0	24	17	49	7	28	0	49	3	37	32	32
German	0	34	0	14	10	46	5	24	1%	49	2	32	46	24
Russian	0	9	0	7	1	9	0	6	54	37	11	20	18	11

Table 21-C
PARTICIPANTS' USE OF MAJOR SCIENTIFIC LANGUAGES

	Percentage of All Participants N=467							
English	46%	51%	11%	46%				
French	12	54	4	34				
German	6	42	3	23				
Russian	8	13	2	11				

^aNo data available for Group M Authors.

^bIn other than native language

^cThe percentages in these two columns are based on the number of Authors who did not indicate a specific language as native. The Ns for English, French, German, and Russian are 86, 150, 170, and 183 respectively. Thus, the percentages for English indicate that 98% of those persons who did not have English as a native language had a reading knowledge of English and 88% of them had, in 1966, read a scientific work written in English.

^dThe percentages in these two columns are based on the number of Attendants who did not indicate a specific language as native. The Ns for English, French, German, and Russian are 168, 259, 270, and 248 respectively.

other groups. Additionally, there was a tendency in Group A to restrict reading of foreign literature not only to fewer forms but to smaller numbers of these forms than was true in Groups O and M. For example, participants in Group A for the most part read one journal article or one book, whereas participants in the other groups typically reported reading several articles or books. The data do not depict Group A participants as disproportionately unqualified to read in languages other than their own or uninterested in using non-English scientific literature; compared with the other groups they, too, had substantial reading knowledge of foreign languages and had put such knowledge to use in 1966.

About a fifth of the respondents reported that they were teaching courses in languages other than their native ones. This finding results not so much from the so-called brain drain as from (a) a tendency in smaller underdeveloped countries to conduct their various science classes in English, and (b) travel by scientists to other countries where, during a brief tenure, they not only conduct research but teach.

More than a third (38%) of the participants had worked in a foreign country at some time during their careers, and almost half of them (or 16% of the total sample) had studied, taught, or conducted research in more than one foreign country or on more than one occasion. Authors had more often conducted work in other countries than had Attendants, and Group O participants had done so more frequently than had those in

Groups A or M. The average duration of foreign visits was approximately a year. Table 22 (parts A and B) presents these data. The types of work in which respondents participated while in foreign countries appear in Table 23-A which shows that research was the most usual one and that it was often combined with teaching or lecturing. A fifth of the participants had studied in foreign countries though this finding was less characteristic of Group A than of the other two.

The sources of financial support of participants' travel and work in foreign countries appear in Table 23-B; the two principal sources are participants' own governments and the host institutions. The groups differed somewhat with regard to their main sources of support, for Group A most frequently indicated "own government" and Group O, "host government". Since the USA was the country in which most Group O respondents had conducted their foreign work, it is apparent that the same government supported most of the travel both in Group O and in Group A.

The countries visited were located in all parts of the world and constitute a lengthy and varied list (Appendices F-1 and F-2); however, Group A participants typically visited European countries, and those in Group O, as previously mentioned, came to the USA. Group M Attendants (these data were not available on Group M Authors) not only made fewer foreign visits than was true of Attendants in other groups but made most of their visits to countries within their own group (i.e., to other Eastern European socialist countries included in Group M). Conspicuous by their absence from the list of countries visited are the underdeveloped

Table 22-A
FREQUENCY OF FOREIGN TRAVEL TO CONDUCT PROFESSIONAL WORK

Number of Visits to Foreign Countries	Percentage							
	All Participants N=467	Authors ^a			All Groups N=284	Attendants		
		Both Groups N=183	Group A N=62	Group O N=121		Group A N=85	Group O N=134	Group M N=65
One	22%	23%	19%	26%	22%	21%	27%	12%
Two	9	12	8	14	7	5	9	6
Three	4	7	6	7	1	2	1	0
Four or more	3	2	2	2	3	5	2	3
At least one	38	44	35	49	33	33	40	22

^aNo data available for Group M.

Table 22-B
DURATION OF PROFESSIONAL VISITS TO FOREIGN COUNTRIES

Months	Percentage ^a							
	All Participants' Visits N=264	Authors' Visits ^b			All Groups N=128	Attendants' Visits		
		Both Groups N=136	Group A N=34	Group O N=102		Group A N=33	Group O N=75	Group M N=20
0-3	24%	24%	26%	23%	24%	24%	19%	45%
4-6	10	10	9	10	11	12	12	5
7-9	10	10	15	8	10	18	8	5
10-12	25	33	26	35	17	15	21	5
13-18	3	3	3	3	4	9	1	5
19-24	8	4	3	5	11	6	13	10
25-30	<1	0	0	0	1	0	1	0
31-36	3	4	6	4	2	3	1	5
37-42	1	1	0	1	2	0	1	5
43-48	2	1	3	1	3	6	1	5
>48	6	7	9	7	5	6	7	0
Unspecified	6	2	0	3	9	0	13	10

^aThe percentages are based on the number of visits reported by respondents in each group.

^bNo data available for Group M.

Table 23-A
NATURE OF PROFESSIONAL WORK CONDUCTED IN FOREIGN COUNTRIES

Activity	Percentage ^a							
	All Participants' Visits N=264	Authors' Visits ^b			Attendants' Visits			
		Both Groups N=136	Group A N=34	Group O N=102	All Groups N=128	Group A N=33	Group O N=75	Group M N=20
Research	63%	66%	62%	67%	60%	82%	56%	60%
Teaching	28	35	35	33	20	24	17	15
Studying	41	33	35	32	48	27	61	40
Lecturing	2	3	6	2	2	3	1	0
Professional	1	1	3	1	1	0	0	5

^aThe percentages are based on the number of visits reported by respondents in each group.

^bNo data available for Group M.

Table 23-B
SOURCES OF FINANCIAL SUPPORT FOR TRAVEL AND WORK IN FOREIGN COUNTRIES

Source	Percentage ^a							
	All Participants' Visits N=264	Authors' Visits ^b			Attendants' Visits			
		Both Groups N=136	Group A N=34	Group O N=102	All Groups N=128	Group A N=33	Group O N=75	Group M N=20
Own government	30%	26%	53%	14%	34%	58%	20%	60%
Own institution	7	10	21	5	4	6	4	0
Host government	25	24	6	30	25	33	23	20
Host institution	33	47	24	55	18	6	28	0
Private foundation	6	4	12	1	8	15	7	0
International agency	6	10	3	12	1	0	1	0
Self	9	6	18	2	13	9	11	15
Unspecified	7	5	0	7	11	9	12	10

^aThe percentages are based on the number of visits reported by respondents in each group.

^bNo data available for Group M.

countries. Only in Group O was there a fair number of participants who had conducted professional work, usually research and teaching, in these nations.

The data on utilization of foreign languages and on foreign travel suggest that the participants in the International Congress of Psychology were possibly better informed of and more closely in touch with developments in this field at an international level than would probably be true of psychologists in general in their respective countries. These participants tended to have information on foreign work that they might wish to pursue and to have foreign contacts to renew or develop further through interaction at this international meeting. The composite picture of a Congress participant which emerges from the findings of this study is that of an active researcher who devoted much of his time at the Congress to getting information on recent findings and future trends in work relevant to his own. The relatively small immediate impact on work of information exchanged during the meeting compared to the substantial effort spent in arranging to pursue clues to sources of information of possible significance for future work suggests that the primary function of the Congress was to alert participants to worthwhile potential information sources and to enlarge the informal communication network. Participants typically waited until after the conclusion of the meeting to follow up on leads they had obtained. The communication problems they described suggest that much might be done to facilitate informal interaction during the meeting and thus to utilize to better advantage the opportunity for international face-to-face communication so uniquely provided by such congresses.

Part II

AN OVERVIEW OF THE FUNCTION OF THE XVIIIth INTERNATIONAL CONGRESS OF PSYCHOLOGY, MOSCOW, 1966, IN SCIENTIFIC INFORMATION EXCHANGE¹⁶

The XVIIIth International Congress of Psychology was held in Moscow, USSR, on August 4-11, 1966 and was organized by the Soviet Psychological Association, the host, with the assistance of the Academy of Science of the USSR, and ministries of education for the USSR and the Russian Socialist Republic. The President of the Congress was Professor A. N. Leontiev, a distinguished Soviet psychologist who holds the Chair of Psychology at Moscow University. The Soviet secretariat for the Congress also included A. R. Luria, Chairman of the Program Committee, A. A. Smirnov, Chairman of the Organizing Committee, and O. K. Tikhomirov, General Secretary.

The official attendance was nearly double that anticipated; while the original planning figure was for an attendance of approximately 2,500, actually 4,215 individuals registered as members and an additional 778 registered as accompanying members (adults). Since these figures include neither younger dependents of members nor the honorary guests of the Congress, a total of about 6,006 persons are estimated to have come to Moscow as a result of the Congress. The discrepancy between the planned and actual attendance was the source of problems relating to shortages of printed materials, facilities and translators and made the mundane matters of arranging housing and travel rather demanding for some visiting participants.

Forty-four countries were represented by the registration at the Congress (Table 24). The Soviet Union had the largest number registered, followed, in descending order, by the United States, West Germany, France, United Kingdom, East Germany, the Netherlands, and Poland. Attendants from the USA and USSR also authored a majority (nearly 70%) of all papers scheduled for the Congress. At the XVIIth International Congress in Washington in 1963, there were only two members registered from the Soviet Union. Then, the descending order of countries attending was: the United States (which accounted for approximately two thirds of the 1,541 registered), Canada, the United Kingdom, France, the Netherlands, Italy, Japan, Sweden, and Germany.¹⁷ Countries represented at the Moscow Congress but not at Washington were: Bulgaria, Cuba, East Germany, Hungary, Mongolia, Portugal, Singapore, Tunisia, and Zambia. Countries represented at the Washington Congress but not at Moscow included: Lebanon, Nigeria, the Philippines, Saudi Arabia, and South Africa.

The Congress formally convened at 5:00 p.m. on August 4, 1966, with a plenary session for official welcomes and other addresses followed by an impressive program of the performing arts in the Soviet Union. There were three other plenary sessions during the Congress, each featuring an invited address by an eminent psychologist. The basic scientific meetings, apart from the plenary sessions, were 37 symposia sessions supplemented by sessions for submitted papers and film exhibitions. The Program Committee had issued a general call for abstracts of proposed scientific papers early in 1965. Those accepted were either published in slightly elaborated form in the Proceedings of a relevant symposium as "silent" papers or expanded into short papers for oral presentation at either a symposium or a thematic session on submitted papers.

Symposia sessions were three hours long and followed one general pattern: A symposium included a chairman and an organizer who might or might not be the same individual, and four to six individuals

¹⁶This summary also appears as "Scientific Information Exchange at the XVIIIth International Congress of Psychology, Moscow, 1966", International Journal of Psychology, 1968 (in press) by Belver C. Griffith, William D. Garvey and Bertita E. Compton. It is based in part upon the full report of the Project's study prepared by the staff of the Johns Hopkins Center for Research in Scientific Communication (Part I of the present report). Harley O. Preston and A. James Miller assisted in preparing this overview.

¹⁷There were 1,541 persons registered as members for the 1963 Congress and 361 as associates. The latter category is roughly analogous to the "accompanying member" category — about 120 of the 1963 associates could be identified as wives of members.

Table 24

REGISTRATION AT THE XVIIIth INTERNATIONAL CONGRESS BY COUNTRIES

Country	Number	Country	Number
Argentina	8	Norway	29
Australia	24	Pakistan	3
Austria	4	Peru	5
Belgium	49	Poland	109
Brazil	7	Portugal	4
Bulgaria	49	Rumania	31
Canada	64	Singapore	1
Columbia	5	Spain	72
Cuba	11	Sweden	86
Czechoslovakia	90	Switzerland	15
Denmark	73	Tunisia	1
Finland	48	Turkey	9
France	183	United Kingdom	140
FRG (West Germany)	188	Uruguay	4
GDR (East Germany)	115	USA	856
Hungary	87	USSR	1,528
India	5	Venezuela	11
Iran	2	Yugoslavia	29
Israel	9	Zambia	2
Italy	42		
Japan	83	TOTAL	4,215
Mexico	12		
Mongolia	5		
Netherlands, The	115		
New Zealand	2		

who had been invited by the organizer to read basic papers of 20 to 30 minutes duration. Many symposia also had a few shorter papers presented orally. These were called added papers because they had usually been referred to the symposium organizer by the Program Committee to be included in addition to those he himself had invited. A third type of paper in all symposia was the silent paper. Such papers were usually not presented orally but instead were printed in the Proceedings of the particular symposium. These papers had also been referred to the symposium organizer by the Program Committee.

Symposia varied considerably in the quantity of each type of paper included within the session, in the amount of time allowed for general discussion of papers, in the number of discussants scheduled, and in the inclusion of oral presentations of any "silent" papers. Ten special sessions not described in the Congress prospectus and apparently added to accommodate an unexpectedly high number of submissions were held for the reading and discussion of submitted papers. Each such session was organized around a common area or theme and papers were limited to 15 minutes for oral presentation and 5 minutes for discussion. Considering the several types of sessions, there were close to 900 presentations of all types.

An attempt to disseminate the material to be scheduled for the Congress in the form of twenty-odd published volumes of reports for the Congress sessions (Proceedings) and three volumes of abstracts covering all contributions was, to some extent, unsuccessful because the attendance exceeded the supply of Proceedings. It is regrettable that the supply of Proceedings volumes was rapidly exhausted, and especially regrettable that these volumes were not directed to major university libraries and depositories that would make them available to a wider scientific audience.

The special arrangements by the Soviet secretariat of the Congress to facilitate communication included simultaneous translation in the three official languages of the Congress (English, French and Russian) of all presentations of scheduled symposia; a directory of participants' addresses (the usefulness of which was reduced by rearrangements in housing occasioned by a concurrent meeting of the Supreme Soviet); and the provision of translators in training at the Institute for Language Studies of Moscow University to assist participants and to facilitate informal communication. Perhaps the greatest single effort was the publishing of the Congress Proceedings, already mentioned, containing papers scheduled for the Congress. Taken in all, the efforts of the Soviet hosts to ensure the success of the Congress are unlikely to be matched in the course of this series of congresses.

THE STUDY OF INFORMATION EXCHANGE AT THE CONGRESS

Late in 1965, the APA Project on Scientific Information Exchange in Psychology was invited by Professor H. C. J. Duijker, then Chairman of the IUPS Committee on Communication and Publication, to study and describe information exchange behavior at the Congress. The study was suggested as a means of obtaining information that would assist IUPS and sponsoring committees of the host national associations in the programming and planning of future congresses. Professor Duijker's invitation was accepted under arrangements enlisting active participation of the secretariats of the Congress and of IUPS and designed to ensure that the research undertaking would have and would maintain an international character.¹⁸ A research team including Dutch, Soviet and American psychologists and assisted by very capable Soviet students attended the Congress for the purpose of observing the sessions and sampling participants. For the purpose of the study, Congress participants sampled in Moscow were divided into two groups: persons who gave presentations in the symposium sessions, hereafter referred to as authors, and those persons who attended such presentations, hereafter, attendants. Questionnaire studies were designed to provide information on the nature of work reported on the occasion of the Congress and its pattern of prior dissemination and to assess the effect of information-exchange at the Congress on future scientific effort of both groups of participants. The data were collected through a series of simultaneous surveys from Amsterdam (for European, African and some Asian samples), Moscow (for Russian and Eastern European samples) and Washington (for American and most Asian samples).

SOME DATA ON INFORMATION EXCHANGE AT THE CONGRESS

Symposia Presentations

Most presentations were based upon an experiment or field study (43%) or a review of a series of studies on which the author conducted or collaborated (43%). A third type of report, a review of a series of studies in only a part of which the Author participated, was made by an additional one tenth of the authors, and thus, a majority of all authors responding to the survey reviewed a program of research in which they were active researchers.

Even though the review presentations included older work, the most recent study in the series described was usually more current, with regard to both inception and initial reporting, than single laboratory or field studies and they reported research about as current as that presented at the American national meeting, the American Psychological Association Annual Convention, on which the Project has extensive comparative data.

The approximate date of inception of a work in the earliest study of these series was five years before the Congress, compared with one and a half years before for the most recent study and with two and a half years for the single research or field study. This most recent study of a series first became reportable seven months prior to the Congress, three months later than the typical single research or field study.

¹⁸These arrangements were extremely elaborate and cannot be fully described here. See Part 1 of the present report on details of procedures and for comparisons among the samples polled from different loci. Response rates from the Moscow sample were somewhat low (30-40%) and caution should be employed in interpreting these data.

Some prior dissemination of material contained in presentations was more frequent for the Congress papers than it would be for papers at a large American meeting. Of the authors, 75% had made some dissemination of the main content of their presentations prior to the Congress. Oral reports were the more frequent forms and most of those who made written reports had also reported their work orally. Most of the pre-Congress oral reports were presented before specialized groups within the authors' own country, and it is probable that such occasions were not effective in disseminating the research findings reported at the Congress to an international audience.

In line with the emphasis on reviewing extensive amounts of research, pre-Congress written reports appeared in archival media more than twice as often on the average than would be true of written reports prior to a large American meeting. Although these prior written reports commanded a potential international audience, most were published only within the author's own country and tended to deal with the older research in the series.

The meeting presentation is typically an interim report of material that will be later reported in another, more archival form,¹⁹ and such was the case for Congress presentations. Most authors (77%) had specific plans for future publications of the work they reported at the Congress, and another 14% expected some future publication although they had no definite plans.

The Authors' Experiences at the Congress and the Resulting Effects on Their Work

As a result of the interaction stimulated by the making of a presentation, some 28% of authors reported some modification of their current activities in relation to work in the area of their presentation. Generally, these modifications produced substantial changes in the affected work, the modification most frequently pertaining to the initiation of new research or the introduction of new procedures, materials or techniques into research.

In addition to the direct impact upon the authors' work of information received through attending the Congress, nearly three quarters of the authors indicated that they either had established or planned to establish some continuing relationship with other Congress participants for the further exchange of scientific information. Thus, the meeting very clearly served an alerting function and provided opportunities to establish new networks of informal communication. Additional evidence is the fact that nearly two thirds (63%) of all authors received requests either for copies of their presentation or further information on reported work.

The Attendants' Experiences at the Congress and the Resulting Effects on Their Work

The questionnaire used for attendants was so organized as to allow them to respond to most questions relative to a single paper within a symposium which they attended. Slightly over half of them reported some prior knowledge of the work of the author of the presentation they attended; the written reports of Congress presentations published and distributed at the Congress were not the main source of such awareness. Most of them had read a report of other research the author had conducted, and more than a tenth had heard the author make an oral report of the work prior to the Congress. In addition, informal interpersonal communication played a major role in alerting attendants to presentations at the Congress and slightly more than 10% of attendants received information on the work from colleagues either within their own institutions or located at other institutions.

About one quarter of all attendants reported that, in addition to hearing the presentation, they either had planned or were planning information exchange with the author about the work he reported. The three principle objectives of making such contacts were to get further information on reported work, to maintain awareness of authors' ongoing and future work, and to initiate a mutual exchange of findings and feedback. Comparatively few attendants (10%), however, reported modifications of their work in the same area as the presentation they attended as the result of those interactions surrounding that presentation.

Considering the meeting as a whole and all interactions with other participants, 28% of the attendants indicated that they had received information which would result in a major modification of their work.

¹⁹ See B. E. Compton, "A Look At Conventions And What They Accomplish," American Psychologist, Vol. 21, No. 2, February, 1966.

Research was the activity chiefly affected. The most frequently indicated modifications concerned the utilization of newly discovered information to guide work in a different (and presumably unanticipated) direction. Formal oral presentations were most frequently cited as the source of information resulting in these modifications; however, informal types of exchange, when grouped together, were equally effective in stimulating modifications.

In terms of the effectiveness of the Congress as a means of dissemination, half of the attendants in this sample reported some effect upon their scientific effort, either in terms of modification of their work or the establishment of new contacts, as a result of their participation in the Congress. Considering that these effects were reported within only a few months of the meeting, scientific communication at the Moscow Congress appears to have exerted a substantial impact upon world psychology.

Scientific Communication Problems at the Congress

Considering first the structure of the Congress, a fifth of the participants seemed to regard the large and crowded Congress as an inherently unsatisfactory medium for effective scientific communication. Suggested alternatives were to hold meetings devoted to specific research areas in psychology or to restrict the size of the Congress. More than a third of the participants suggested that the organization and general format of the Congress should be changed; the most frequent suggestion pertained to providing some formal arrangements for conducting small meetings of persons working in specific areas in order to facilitate discussion of common problems.

The most common specific communication difficulty was that of language — 30% of the respondents described difficulties resulting from language barriers. About one quarter of the respondents found the simultaneous translations poor or impossible to follow. A suggestion, related also to lack of informal information exchange, was made that more interpreters be available to facilitate informal discussion among scientists with common interests. About one of every five participants felt that scientific information exchange at international meetings could be facilitated by improving the methods of distributing copies of presentations and/or by improving the actual mechanics of presentations, as, for example, in the use of audio-visual aids.

SUMMARY

The XVIIIth International Congress of Psychology was a large meeting with nearly 900 events attracting more than 4,000 participants — far more than expected or perhaps even hoped for. The Congress presentations displayed an extensive amount of research work from the authors' countries; most reviewed series of studies spanning research conducted, on the average, over a period of five years.

The picture of the Congress participant which emerged from these findings was that of an active researcher who exerted considerable effort at the Congress to obtain access to recent findings and future trends in work related to his own. The relatively small direct impact on his work of concrete information exchanged during the Congress, compared to his considerable effort and success in pursuing clues to sources of significant information, suggests that the primary function which the Congress served was to alert the participant to future sources of information and to establish networks of informal exchange.

The chief advantage of the Congress, as presently constituted, appears to be the opportunity it affords psychologists throughout the world to meet and establish contacts. The communication problems reported by Congress participants suggest that much more can be done to make such information exchange more effective.

Part III

SOME ISSUES RELATIVE TO SCIENTIFIC COMMUNICATION

AT AN INTERNATIONAL CONGRESS ²⁰

The following emerged in the Project's experience as technical and managerial considerations that are relevant to the operation and planning of international congresses and to their role in scientific communication.

Technical Problems of Organizing and Running the Congress

Apparently, a number of minor problems bedevil the host organizing committee of the Congress. Examples include the importance of requiring registrants to print names (handwriting training differs from country to country and proves generally unreadable to the host country's volunteer assistants) and to indicate the form of their name under which they received mail. Spanish tradition results in each person's full name including a number of surnames, which he may or may not use. Slides are incompatible with simultaneous translation and are not standardized throughout the world; mimeographed handouts, despite their inconvenience and the noise people make in looking at them, are necessary, if only as a supplement to slides. Transmission of such information on procedural details would contribute greatly to the smooth operation of future Congresses.

Programing Congress Events

In the present procedure the hosts are responsible for organizing the program but assign the responsibility for choosing individual participants to symposium organizers chosen to give broad international representation; then, contacts and arrangements are left up to the organizers. Not only the invited speakers but sometimes also the organizers tend to place a low priority on the very difficult and time consuming tasks of translating, editing, and publishing titles and abstracts for the program. While these procedures prevent a single national view of psychology from dominating the meeting, it introduces a major disadvantage in terms of adding an additional correspondence link with terminals, the symposium organizers, dispersed throughout the world and operating in a number of languages. Reducing the time requirements of this link would facilitate the early printing and distribution of a descriptive program, which, in turn, might materially improve informal communication — apparently the chief scientific function of the Congress.

A possible alternative is that IUPS appoint a permanent Program Committee with continuity of membership and restrict the role of the organizers to proposing topics and offering a list of proposed speakers to a central committee. This committee would presumably act by advising a representative in the secretariat of the host country who would correspond directly with persons chosen to appear on the program, thereby facilitating the early gathering of program materials. It may be noted that a continuing Program Committee would remove one of the current limitations on holding the Congress in the less developed countries.

The processing and upgrading of the quality of contributed papers should also be considered. One possibility would be for each country to nominate speakers from the recent meetings within their own country to the centralized program committee. It seems possible that program committees of national meetings within each country could provide valuable information concerning the younger generation of gifted psychologists in their country.

²⁰The Project acknowledges the assistance of Charles W. Bray and Roger W. Russell in the preparation of this part of the report and thanks them for pointing out to the staff the perennial character of many of the issues described herein.

Supplemental Meetings

One fifth of the respondents seem to find the international congress, which must to some extent be a crowded and a very diverse meeting, an unsatisfactory medium for international scientific communication. The rather frequent suggestion from congress attendants, small meetings devoted to specialized topics, should be considered as an additional IUPS program. One plan might be to have yearly meetings in technical areas and convene a general Congress less frequently. In any case, IUPS might consider a special meeting, or assistance on setting up a new international society in the field of clinical psychology, and IUPS should assume a greater responsibility for informing attendants of the heavily experimental bias of the Congress in its present format.

Tourism

There has been speculation as to whether some scheduling device might be used to separate tourism, including the visiting of local scientific facilities, from the scientific aspects of the meeting. Tours might be scheduled for the first three days of the Congress. Following these days, the delegates would be officially welcomed and would have a chance to meet each other, and the scientific sessions would consume an additional four or five days. One special advantage of such a scheme is that it would allow the host psychologists to be present at the scientific sessions rather than having to remain at their lab in order to act as guides for the visitors. The recent meeting of the XI International Congress of Psychology, Mexico City, 1967, followed such a scheme with some apparent success.

Translation

One of the greatest barriers to communication, obviously, is the limited language skills of participants. Simultaneous and other translation suffers from the lack of scientific training of translators. In this connection, an interesting suggestion is that the Federal government undertake a systematic program of support to train psychologists in simultaneous translation, providing both the instructional facilities and the provision of travel funds for these persons to attend future congresses and serve as translators. Parallel programs to effect this system might be carried out in the major countries represented in IUPS.

A program of this type would bypass the professional translator who does not seem to do an acceptable job on scientific material. In addition, it would generate a cadre of presumably young and active researchers who had a high degree of access to research in other languages.

General

Each Congress reflects conditions specific to their setting. Special problems at Moscow included the Cyrillic alphabet and the confusion created by multiple transliterations between it and the Roman alphabet, the distance between housing and meetings, and apparent shortages of clerical help and office equipment. Special advantages include the simultaneous translation of all sessions, the remarkable publishing effort required to produce the Proceedings by the time of the Congress and the provision of translators to assist Congress members. (Because of the comparatively infrequent psychological meetings for the entire Soviet Union, the 1966 Congress may have taken on a special function as convening psychologists from most Soviet republics; this may partially explain the high Soviet attendance). If other Congresses are any guide, most meetings in this series will be dominated by participants who can communicate in English, will be of a more manageable size — the Soviet attendance of the Moscow Congress was greater than that from all countries at the Washington Congress in 1963 — will only provide published abstracts (probably following the Congress unless the programming is centralized), and will provide no translators at all.

All of the above, and, in fact, any projections based upon this report, presupposes continuing Federal support, not only for the travel of individuals to attend the Congress but also for the exchange of scientists. Any reduction in the level of such support would reduce the relative contribution of American psychology to international exchange of scientific information. On balance, this would seem most detrimental because of the large size of the discipline in the United States and its comprehensiveness and degree of development relative to psychology in other countries.

Serious consideration should be given to the advantages and disadvantages of a single official language. The present policy is to have three official languages: French, English and the native language of the host country. If the third is not readily accessible to American and Western European attendants, the degree of international communication is low, and the provision of program time for discussion often becomes an empty formality. Perhaps a single language would be generally advantageous, provided national psychologists without much collective facility in the selected language both organized their delegation and provided appropriate domestic channels directed toward post-Congress disseminations. (In this connection, a study might be made of another discipline, biochemistry, which has selected English as a single international language).

An optimistic note is struck by the interest of IUPS in having this study conducted and by the general helpfulness of persons connected with the Congress in cooperating with the research. Focusing upon the scientific communication functions of the Congress plus the setting of a couple of realistic goals for the operation of Congresses in the near future may materially benefit the informal exchanges which emerged as the most important function of these meetings. Substantial improvements in informal information exchanges at the Congress could result from effecting the following two measures: (1) early publication and dissemination of the Congress program, and (2) an effective local directory and message exchange center at the site of the Congress.

Finally, the scientific functions of the Congress seem the most diffuse of any meeting the Project has studied. A student of the Project's work will note that the direct impact of information exchanged at the Congress is a good deal lower than at American meetings. However, little statistical account can be taken (1) of the benefits of communication in which attendants participated during their travels, (2) of the nature of diffusion among national psychologies at different methodological levels, and (3) of the beneficial impact on developing disciplines in economically poorer countries. Such issues suggest that any similar study of the 1969 London Congress should be expanded to examine a broader set of expectations and goals among participants and the extent to which they are fulfilled at the meetings. At present, studies of international meetings and the very limited information existing on other aspects of the functioning of science at an international level permit no adequate assessment of the contribution of the international congress to the conduct of scientific work and no solid bases for distributing effort and support among various media, including the exchange of scientists, of international communication.

APPENDIX A: COVER LETTER FOR MOSCOW CONGRESS AUTHOR SURVEY

INTERNATIONAL UNION
OF PSYCHOLOGICAL SCIENCE

I.U.P.S.

UNION INTERNATIONALE
DE PSYCHOLOGIE SCIENTIFIQUE

МЕЖДУНАРОДНАЯ АССОЦИАЦИЯ
НАУЧНОЙ ПСИХОЛОГИИ

Dear Colleague:

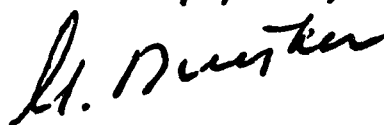
The International Union of Psychological Science (IUPS), under whose auspices the International Congress of Psychology in Moscow was held, is undertaking a series of studies on the international communication of scientific information in psychology. The Moscow Congress offers the opportunity to obtain data on the scientific information exchange activities of psychologists throughout the world, and it is for this purpose that we are conducting a questionnaire survey of the participants in this meeting.

You are one of the psychologists who made a presentation at the Congress. At the top of the questionnaire you will find attached the title of this presentation. I would like to point out that some of the questions on the questionnaire refer specifically to your presentation and these questions should be answered with regard to this specific presentation.

I am writing you on behalf of the Executive Committee of the IUPS to request that you complete the enclosed questionnaire and return it to me, in the enclosed addressed envelope, at your earliest convenience. It is hoped that the information obtained from these studies will not only contribute to our insight into the functions of International Congresses but may suggest ways in which the IUPS might utilize other media to supplement and improve scientific communication on an international level.

On behalf of the Executive Committee I wish to thank you in advance for your cooperation in this study. Please feel free to write us and to give us any suggestions you may have relative to the improvement of international scientific information exchange in psychology.

Sincerely yours,



Hubert C. J. Duijker
Chairman
I.U.P.S. Committee on
Publication and Communication

Hubert C. J. Duijker
Psychologisch Laboratorium
der Universiteit van Amsterdam
Keizersgeacht 613
Amsterdam C, Netherlands

APPENDIX B-1: AUTHOR QUESTIONNAIRE

1. The first question pertains to the nature of the main content of your presentation and the history of **your own research** which you reported in the presentation. Please check the category below which describes your presentation and, if you reported on your own research, give the approximate dates at which this research began and when it reached a stage at which it could be reported to your colleagues.

Check the appropriate blanks below.

_____ a report of a laboratory experiment or field study which you personally conducted or on which you collaborated with others.

(a) When did this research begin? (Include exploratory work but do not consider work which you regard as a separate prior study, even though it is directly related.)

Approximate beginning date. _____ month _____ year.

(b) When was the research in this particular study completed, that is, when did it reach a stage at which you could have given a detailed informal report of the results and their interpretation to a group of colleagues working in the same area of research?

Approximate date at which such a report could be made. _____ month _____ year.

_____ a review or synthesis of a **series** of studies all of which you personally conducted or on all of which you collaborated.

(a) When did the research work in the **earliest** of the studies in this series begin?

Approximate beginning date. _____ month _____ year.

(b) When did the research work in the **most recently** completed of these studies begin? (Include exploratory work but do not consider work which you regard as a separate study, even though it is directly related.)

Approximate beginning date. _____ month _____ year.

(c) When was the research in the **most recent** study completed, that is, when did it reach a stage at which you could have given a detailed informal report of the results and their interpretation to a group of colleagues working in the same area of research?

Approximate date at which such a report could be made. _____ month _____ year.

_____ a review or synthesis of a series of studies which you conducted or on which you collaborated on only a **portion of the series**.

(a) When did the research work in the **earliest** of your own studies within this series begin?

Approximate beginning date. _____ month _____ year.

(b) When did the research work in the **most recent** of your studies begin? (Include exploratory work but do not consider work which you regard as a separate study, even though it is directly related.)

Approximate beginning date. _____ month _____ year.

(c) When was the research in this **most recent** study completed, that is, when did it reach a stage at which you could have given a detailed informal report of the results and their interpretation to a group of colleagues in the same area of research?

Approximate date at which such a report could be made. _____ month _____ year.

_____ a review or synthesis of a series of studies in which you **did not participate** as an active researcher.

_____ Other. Please describe the contents of your presentation briefly. _____

2. The next two questions are concerned with dissemination of information about the main content of your presentation to other scientists **prior to the meeting of the Moscow Congress**. (If your presentation reviewed several of your own studies, please answer these questions on the most recently completed study that was described in your presentation.)

a. Did you, prior to the Congress, make an oral presentation based on the main content of your presentation to the meeting of any scientific group, society or academy, or to a meeting of your associates within your own institution?

Yes _____ No _____

If YES, please give the name or describe the type of group(s) below and give the approximate date of your report to each group.

NAME OR DESCRIBE GROUP	LOCATION OF MEETING	DATE	
		Month	Year
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

b. Did you make a written report of any type (thesis or dissertation, proceedings paper, research report prepared for limited distribution, paper within a volume of collected papers distributed by your institution, journal article or book) based on the main content of your presentation prior to the Congress?

Yes_____ No _____

If YES, please describe the nature of the report and give the approximate date for the distribution of copies.

TYPE OF REPORT	DATE	
	Month	Year
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3. Do you currently have specific plans for some future publication of the main content of your presentation?

Yes_____ (If YES, answer part a. of this question.)

No _____ (If NO, answer part b. of this question.)

a. If YES: (1) In what format will the material be published?

- _____ a book or part of book.
- _____ a dissertation or thesis prepared to meet degree requirements. Approximate number of copies that will be distributed: _____
- _____ a university or academy monograph. Approximate number of copies that will be distributed: _____
- _____ a journal article. Please name journal: _____
- _____ a paper within a volume of collected papers published by your institution. Approximate number of copies that will be distributed: _____
- _____ other. (Please specify) _____

(2) When did you or when do you plan to start preparing the manuscript for publication: _____(Month/year).

(3) What is the actual or expected date of submission of the manuscript for publication: _____(Month/year).

b. If NO, i.e., if you have no definite publication plans now, do you expect some future publication?

Yes _____ No _____

If YES,

Name expected medium of publication: (journal, book, etc.) _____

Estimate the time of submission for publication _____

If you plan to include work in addition to that reported in your presentation, describe the nature of this additional work _____

4. Please check below to indicate your current activities in the subject-matter area of your presentation at the Congress, then, indicate and describe any modification (such as use of new techniques) of these activities as an outcome of any interaction with other Congress participants.

a. Check below your current activities in area of your presentation.	b. Please describe below any modifications in these activities resulting from interactions.	c. When did the interaction leading to the modification occur?	Check
Currently conducting research in area	_____	Before Congress At Congress After Congress	_____ _____ _____
Planning to conduct research in area	_____	Before Congress At Congress After Congress	_____ _____ _____
Involved in clinical or applied work in area . . .	_____	Before Congress At Congress After Congress	_____ _____ _____
Teaching course in area	_____	Before Congress At Congress After Congress	_____ _____ _____
Directing or supervising research in area	_____	Before Congress At Congress After Congress	_____ _____ _____
Other. (Please specify) . . .	_____	Before Congress At Congress After Congress	_____ _____ _____

5. Did any interactions with others about or resulting from your presentation lead to modifications of any of your work activities not directly related to the subject matter of your presentation?

Yes _____ No _____

If YES, briefly describe. _____

6. As the result of any discussion relative to your presentation during the Congress did you decide to seek some continuing interaction with any of the persons who contacted you, i.e. would you like to establish some continuing relation with any of these persons for the purpose of exchanging scientific information?

Yes _____ No _____

If YES, answer the remaining parts of this question.

Were you familiar with any of the work of these persons prior to the Congress?

Yes _____ No _____

Check the nationality of the persons with whom you plan to continue this exchange.

Europe

- ____ USSR
- ____ United Kingdom
- ____ France
- ____ Germany
- ____ Netherlands
- ____ Denmark
- ____ Other European countries.
- Please name: _____

Western Hemisphere

- ____ USA
- ____ Canada
- ____ Brazil
- ____ Other countries in the Western Hemisphere.
- Please name: _____

Near and Far East

- ____ Japan
- ____ Australia and New Zealand
- ____ India
- ____ Israel
- ____ Other Eastern countries.
- Please name: _____

Please describe the types of information that these persons might contribute that would be helpful in your work. _____

7. Please attempt to recall any requests you have received for copies of your presentation or information on your presentation. Then insert in the blanks below the approximate number of requests you received from each of the listed countries:

Europe

- ____ USSR
____ United Kingdom
____ France
____ Germany
____ Netherlands
____ Denmark
____ Other European countries.
Please name: _____

Western Hemisphere

- ____ USA
____ Canada
____ Brazil
____ Other countries in the Western Hemisphere.
Please name: _____

Near and Far East

- ____ Japan
____ Australia and New Zealand
____ India
____ Israel
____ Other Eastern countries.
Please name: _____

8. (a) In what languages do you read journals, books, or other research reports in obtaining scientific information of relevance to your scientific work?

Native language(s) _____

Language(s) currently used in teaching, if different from native language(s) _____

Other languages read _____

- (b) During 1966, did you read any scientific works in these foreign languages? Fill in the blanks below to indicate the language in which these works were written. Also, briefly describe the nature of this written work, that is, a journal article, a book, etc.

Language	Nature of Written Work
_____	_____
_____	_____

- (c) Have you ever studied, taught, or done research, for a period or periods, in a country other than the one where you are now working?

Country	Period		Nature of activity (study, teaching, research, etc.)	Who financed this activity (your government, host government, host institution, etc.)
	From Mo/Yr	To Mo/Yr		
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

9. Having attended the International Congress in Moscow, did you encounter any scientific communication problems which you believe some effort should be made to correct before the next meeting of the International Congress of Psychology?

If YES, please describe and make any suggestions you feel might be helpful to the IUPS in planning future international meetings.

10. Are there any other suggestions you might have to improve scientific communication on an international level? _____

APPENDIX B-2: ATTENDANT QUESTIONNAIRE

1. Please name your highest earned degree (or level of professional certification) and the specialty in which you received this degree.
Degree (or level of professional certification) _____ Specialty _____

The following questions relate to the presentation (described below) at which you were present during the XVIII International Congress of Psychology. Please answer all the questions with specific reference to this presentation.

2. Prior to the Congress, were you acquainted with the work of the author(s) of this presentation?

Yes _____ No _____

If YES, please describe your acquaintance with this work.

- _____ Had read a written version of this presentation.
_____ Had read a report of this work, not specifically written for the Congress. Please describe. (e.g., journal article, monograph, preprint, technical report, etc.) _____
_____ Had read written reports of other work conducted by author(s) or the institutional research program of which the reported work was a part.
_____ Had heard author(s) make an oral report of their work on another occasion prior to the Congress. (Please indicate what kind of occasion. _____)
_____ Had been informed of the work of the author(s) by a colleague within your own institution.
_____ Had been informed of work of author(s) by colleague from an institution other than your own. (Please indicate the nationality of your informant: _____)
_____ Other, please describe _____

3. In addition to hearing this presentation, have you or do you plan to exchange scientific information with the author relative to the contents of his presentation?

Yes _____ No _____

If YES, please check to describe how you approached or plan to approach the author of the presentation and indicate the purpose of such exchanges.

Type of contact was:

- _____ Correspondence prior to the Congress
_____ Question from floor of paper session
_____ Discussion with author at end of paper session
_____ Discussion with author on another occasion at the Congress
_____ Correspondence following the Congress
_____ Other. Please describe _____

Purpose of contact with author was to:

- _____ Clarify some point in the reported research
_____ Request information not in report
_____ Acquaint him with your work
_____ Acquaint him with others' work
_____ Request a copy of the paper
_____ Request reports of his future work
_____ Obtain reaction to your own work
_____ Other. Please describe _____

4. Are you now, or have you ever been, active in the same subject-matter area as the work described in the presentation?

Yes _____ No _____

If YES, please check below to indicate your own activities in the same subject-matter area as the paper.

Your own previous activities in the subject-matter area of paper:

- _____ Previously conducted research in area
_____ Previously made oral presentation in area at a regional or a national scientific meeting
_____ Previously published a journal article in area
_____ Previously published proceedings article, monograph or other report distributed by your institution
_____ Conducted thesis or dissertation or did diploma work in area
_____ Other. Please describe _____

5. As a result of the content of the presentation or other communication from the authors relative to the presentation, do you plan to modify (e.g., incorporate a new technique) either your present or future work in the same subject-matter areas as the presentation?

Yes _____ No _____

If YES, please describe the nature of the two most important such modifications:

MOST IMPORTANT MODIFICATION

Describe nature of modification _____

Name activity modified _____

Did modification result from: _____ Hearing presentation? _____

_____ Reading copy of presentation?

_____ Other communication with author?

Please describe _____

(See other side)

Question 5 continued

SECOND MOST IMPORTANT MODIFICATION

Describe nature of modification _____

Name activity modified _____

Did modification result from: _____ Hearing presentation?
_____ Reading copy of presentation?
_____ Other communication with author?
Please describe _____

6. Did your contacts with this paper or its author cause you to modify your work in an area not directly related to the principal subject-matter area of the paper?

Yes _____ No _____

If YES, briefly describe the modification(s). _____

7. As the result of your contacts with the author and his work did you decide to seek some continuing means of exchanging information with him, i.e. to establish some continuing relation with the author for the purpose of information exchange?

Yes _____ No _____

If YES, what types of information can he contribute that would be helpful to your work? _____

8. Was there another presentation made at this same session which you regard as being more directly related to your work than the one selected for this questionnaire?

Yes _____ No _____ Don't recall _____

9. Considering the Congress as a whole and all interactions with Congress participants, did you receive information that led to a major modification in any of your work activities?

Yes _____ No _____

If YES, describe nature of this modification _____

Name activity modified _____

Name means (presentation, symposium, floor discussion, etc.) through which you obtained this information _____

10. (a) In what languages do you read journals, books, or other research reports in obtaining scientific information of relevance to your scientific work?

Native language(s) _____

Language(s) currently used in teaching, if different from native languages _____

Other languages read _____

- (b) During 1966, did you read any scientific works in these foreign languages? Fill in the blanks below to indicate the language in which these works were written. Also, briefly describe the nature of this written work, that is, a journal article, a book, etc.

Language

Nature of Written Work

- (c) Have you ever studied, taught, or done research, for a period or periods, in a country other than the one where you are now working?

Country	Period		Nature of activity (study, teaching, research, etc.)	Who financed this activity (your government, host government, host institution, etc.)
	From Mo/Yr	To Mo/Yr		
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

11. Having attended the International Congress in Moscow, did you encounter any scientific communication problems which you believe some effort should be made to correct before the next meeting of the International Congress of Psychology?

Yes _____ No _____

If YES, please describe and make any suggestion you feel might be helpful to the IUPS in planning future international congresses.

12. Are there any other suggestions you might have to improve scientific communications on an international level? _____

(See other side)

APPENDIX C: NATIONALITY OF PARTICIPANTS IN MOSCOW CONGRESS

Country	Total Participants In Congress		Authors ^a of Scheduled Papers ^b		
	Number	Percentage N=4215	All Scheduled Papers N=867	Scheduled for Presentation N=286	Scheduled for Discussion Only N=581
Austria	4%	0.1%	0.2%	0.3%	0.2%
Belgium	49	1.2	0.5	1.4	0.0
Bulgaria	49	1.1	0.8	0.3	1.0
Czechoslovakia	90	2.1	2.3	1.7	2.6
Denmark	73	1.7	0.1	0.0	0.2
Finland	48	1.1	0.0	0.0	0.0
Federal Republic of Germany	188	4.5	1.3	1.7	1.0
France	183	4.3	4.3	7.3	2.8
German Democratic Republic	115	2.7	1.8	1.4	2.1
Hungary	87	2.1	1.7	2.1	1.5
Italy	42	0.9	1.6	1.4	1.7
Netherlands	115	2.7	1.0	0.7	1.2
Norway	29	0.7	0.3	0.7	0.2
Poland	109	2.6	2.4	1.7	2.8
Portugal	4	0.1	0.0	0.0	0.0
Romania	31	0.7	1.3	1.0	1.4
Spain	72	1.7	0.1	0.3	0.0
Sweden	86	2.0	0.8	0.3	1.0
Switzerland	15	0.4	0.6	1.0	0.3
United Kingdom	140	3.3	4.5	5.9	3.8
USSR	1528	36.3	40.0	30.8	44.6
Yugoslavia	29	0.7	0.0	0.0	0.0
<u>Western Hemisphere</u>					
Argentina	8	0.2	0.1	0.0	0.2
Brazil	7	0.2	0.2	0.7	0.0
Canada	64	1.6	1.4	2.4	0.9
Colombia	5	0.1	0.0	0.0	0.0
Cuba	11	0.3	0.3	0.7	0.2
Mexico	12	0.3	0.2	0.3	0.2
Peru	5	0.1	0.0	0.0	0.0
Uruguay	4	0.1	0.1	0.0	0.2
USA	856	20.3	29.3	32.9	27.5
Venezuela	11	0.3	0.0	0.0	0.0
<u>Near and Far East and Other</u>					
Australia	24	0.6	0.5	0.3	0.5
India	5	0.1	0.2	0.0	0.3
Iran	2	<0.1	0.0	0.0	0.0
Israel	9	0.2	0.2	0.0	0.3
Japan	83	1.9	1.3	1.7	1.0
Mongolia	5	0.1	0.0	0.0	0.0
New Zealand	2	<0.1	0.0	0.0	0.0
Pakistan	3	0.1	0.1	0.0	0.2
Singapore	1	<0.1	0.0	0.0	0.0
Tunisia	1	<0.1	0.0	0.0	0.0
Turkey	9	0.2	0.1	0.3	0.0
Zambia	2	<0.1	0.1	0.0	0.2

^aIn the case of papers having more than one author, only the first author was used in these tabulations.

^bThe Scientific Program of the Congress listed two types of papers, those scheduled for formal presentation at symposia (listed by author and title of presentation) and those scheduled for discussion only (listed by author).

APPENDIX D: TYPES OF MODIFICATIONS REPORTED BY AUTHORS RELATIVE TO ACTIVITIES MODIFIED

Type of Modifications	Percentage of Authors Involved in Activity Reporting					
	Type of Modification ^a					
	Conduct of Research N=152	Research Planning N=73	Direction or Supervision of Research N=71	Applied Work N=31	Teaching N=57	Other N=8
Broadening scope of work	3%	1%	6%	3%	4%	12%
Initiation of new type of related effort or introduction of new procedures, materials, techniques, apparatus, etc.	12	16	8	10	0	0
Clarification of some technical aspect of work	2	1	0	0	0	0
Expansion of effort (including collection of new or additional data and collaborative efforts)	3	3	6	3		
Alteration of some specific aspect of work (e.g., measures, controls, theory, etc.)	2	7	0	0	2	25
Incorporation of newly discovered information (integration of foreign colleagues' findings)	0	0	0	0	21	0
Change in emphasis (including strengthening of basic ideas)	5	5	3	0	2	0
All types of modifications reported	27	36	23	16	28	38

^aPercentages within each column are based on the number of Authors involved in an activity.

APPENDIX E-1: LANGUAGES USED BY AUTHORS^a

Language	Percentage					
	A Authors N=62			O Authors N=121		
	Native	Reading Knowledge ^b	Current Teaching ^c	1966 Scienti- fic Reading ^d	Native	Reading Knowledge ^b
English	95%	5%	5%	2%	31%	67%
French	3	66	2	39	26	56
German		45		23	11	38
Italian		10		5	11	15
Russian		13		8		9
Swedish					5	2
Norwegian					1	2
German-French					1	1
Scandinavian					2	
Danish					1	2
French-English					1	
Hebrew					3	1
Spanish	2	16		3	1	10
Portuguese						2
Serbo-Croatian						1
Urdu						1
Dutch		3		2	7	3
Czechoslovakian	2					
Bulgarian		2				
Latin		2				
Lithuanian		2				
Folish		2				
Turkish					1	1
Hindi					1	
Unspecified				2		

^aNo data available for Group M.^bLanguages, other than native, in which Authors read.^cLanguages, other than native, in which Authors were teaching at time of survey.^dLanguages, other than native, in which Authors had read a scientific work in 1966.

APPENDIX E-2: LANGUAGES USED BY ATTENDANTS

Language	Percentage of A Attendants N=85					Percentage of B Attendants N=134					Percentage of C Attendants N=65					
	Native	Reading Knowledge ^a	Current Teaching ^b	1966 Scientific Reading ^c	Native	Reading Knowledge ^a	Current Teaching ^b	1966 Scientific Reading ^c	Native	Reading Knowledge ^a	Current Teaching ^b	1966 Scientific Reading ^c	Native	Reading Knowledge ^a	Current Teaching ^b	1966 Scientific Reading ^c
English	95%	5%	2%	1%	26%	72%	19%	66%								
French	2	55		24	17	49	7	28								
Dutch	1				13	2										
Swedish					10	4	1	1								
German		34		14	10	46	5	24	1%							
Japanese					9											
Italian		2			5	7		4								
Russian		9		7	1	9		6	54	37	11	20				
Norwegian					2	1		1								
Finnish					1	1	1									
Spanish		7			1	5		1								
Danish					1	3										
Dutch-French					1											
French-German					1											
Hungarian					1				6	3		2				
Portuguese						1		1								
Polish	1	1						1	6	15		8				
Chinese					1											
Hebrew					1											
Arabic																
Romanian																
Czechoslovakian									9	2		2				
Lithuanian									3	5		3				
Yugoslavian									3							
Hungarian-German									2							
Serbian									2							
Ukrainian									3							
Russian-Ukrainian									3	2						
Georgian									2							
Russian-Georgian									2							
Kazakh									2							
Estonian									2							

^aReading knowledge in other than native language.

^bLanguage used in current teaching, if other than native language.

^cScientific work, in other than native language, read in 1966.

APPENDIX F-1: FOREIGN^a COUNTRY IN WHICH AUTHORS^b CONDUCTED PROFESSIONAL WORK

Country	Percentage ^c	
	Group A N=62	Group 0 N=121
<u>Europe</u>		
Austria	6%	1%
Belgium	2	2
Czechoslovakia	0	1
Denmark	2	1
Federal Republic of Germany	8	2
France	6	8
Ireland	0	1
Italy	2	2
Luxembourg	2	1
Netherlands	5	0
Norway	0	2
Spain	2	0
Sweden	0	2
Switzerland	3	3
United Kingdom	5	12
USSR	6	0
Western Europe	2	0
<u>Western Hemisphere</u>		
Canada	3	2
Colombia	0	1
USA	0	46
<u>Near and Far East and Other</u>		
Algeria	0	2
Australia	3	1
Basutoland	0	1
Israel	2	1
New Zealand	2	1
Somaliland	0	1
South Africa	0	1
Zambia	0	1

^aCountry other than one in which respondent was working at time of survey.

^bNo data available for Group M.

^cSome Authors mentioned more than one country.

APPENDIX F-2: FOREIGN^aCOUNTRIES IN WHICH ATTENDANTS HAD CONDUCTED PROFESSIONAL WORK

Country	Percentage ^b		
	Group A N=85	Group O N=134	Group M N=65
<u>Europe</u>			
Austria	0	1%	0
Belgium	1%	2	0
Czechoslovakia	0	0	2%
Denmark	0	1	0
Finland	0	1	0
France	2	4	3
Germany (East and West)	4	5	2
Greece	1	0	0
Hungary	0	1	0
Netherlands	1	1	0
Poland	0	1	2
Romania	0	0	3
Spain	1	0	0
Switzerland	0	1	0
United Kingdom	8	7	0
USSR	2	1	12
Yugoslavia	1	0	2
<u>Western Hemisphere</u>			
Canada	2	4	0
Haiti	1	0	0
USA	4	25	6
<u>Near and Far East and Other</u>			
Australia and New Zealand	4	5	5
India	2	0	0
Indonesia	1	0	0
Israel	1	1	0
Ivory Coast	0	1	0
Japan	1	0	0
South Africa	0	1	0
Sudan	0	1	0

^aCountry other than one in which respondent was working at time of survey.

^bSome Attendants mentioned more than one country.